Characteristics, High-Risk Behaviors and Knowledge of STI/HIV/AIDS, and HIV and Syphilis Prevalence Among Injecting Drug Users in Tbilisi, Georgia - 2002

Report on the Behavioral Surveillance Survey with a Biomarker Component for the SHIP Project

- Save the Children: STI/HIV Prevention (SHIP) Project
- Infectious Diseases, AIDS and Clinical Immunology Research Center
- Research Institute on Addiction
- Bemoni Public Union

August 2003

Save the Children

Infectious Diseases, AIDS and Clinical Immunology Research Center

BEMONI PUBLIC UNION

USAID
The US Agency for International Development

The STI/HIV Prevention (SHIP) Project is being implemented in partnership with Program for Appropriate Technology in Health (PATH), Tanadgoma and Bemoni Public Union with close collaboration with the Infectious Diseases, AIDS and Clinical Immunology Research Center, the Research Institute on Addiction, the Association of Dermatovenerologists of Georgia and the Republican Center of Health Services for Mother and Child in Batumi.

This study was funded by the United States Agency for International Development (USAID) through SHIP Project of Save the Children (Cooperative Agreement 114-A-00-02-00095-00). The opinions expressed in this report do not necessarily reflect the views of USAID.

Authors:

Larry Dershem, Ph.D.
Save the Children, Georgia Field Office, Tbilisi, Georgia

Silvia Gurrola Bonilla, MSc
SHIP Director, Save the Children, Georgia Field Office, Tbilisi, Georgia

Tamar Sirbiladze, M.D.
Bemoni Public Union, Tbilisi, Georgia

Khatuna Todadze, M.D., Ph.D.
Research Institute on Addiction, Tbilisi, Georgia

Gina Dallabetta, M.D.
Family Health International/IMPACT

Tea Tsagareli, M.D.
SHIP Coordinator, Save the Children, Georgia Field Office, Tbilisi, Georgia

Ketevan Stvilia, M.D.
Infectious Diseases, AIDS & Clinical Immunology Research Center, Tbilisi, Georgia

Interviewers:

AIDS Center: Nino Badridze, MD and Archil Undilashvili MD
Bemoni Public Union: Maia Kobaidze, Maia Javakhishvili, Nana Kakhiani, Nestan Sitchinava, and Zura Sikharulidze.
Research Institute on Addiction: Tamar Bokuchava, Nino Gongliashvili, and Eka Kavtiashvili.

Laboratory Diagnostics:

Manana Gvaberidze, MS.
Head of Serology and Virology Laboratory

Lela Dzigua, MS.
Lab Physician, Serology and Virology Laboratory

Editor:

Charlie Kaften, MA
Director, Save the Children, Georgia Field Office

Translator (English to Georgian):

Irma Khvedelidze

Acknowledgements

This surveillance survey report is the culmination of contributions made by numerous individuals, organizations and institutions, starting at its inception and throughout the entire process of planning, fieldwork, data analysis, writing and editing. Each of their contributions has been invaluable. Furthermore, the United States Agency for International Development (USAID) has provided the necessary funds that allowed this important study to take place.

The early phases of planning the survey relied heavily upon the professional work and insightful knowledge that Bemoni Public Union (BPU), the AIDS Center, and the Research Institute on Addiction—all collaborating with Save the Children's STI/HIV Prevention (SHIP) Project—have regarding injection drug users (IDUs) in Tbilisi. Their work over the years has laid the foundation for this study. Building upon this foundation, Dr. Gina Dallabetta, from Family Health International, lead the SHIP Project through a process that allowed a variety of insights about IDUs to help inform the research protocols eventually used. Gina's advice and guidance has not only been a great learning experience for all involved, but has been crucial in establishing the systematic methodology finally used that was both non-coercive and anonymous.

One of the most demanding aspects of the project was the fieldwork. Working on a minimal budget, all the staff of BPU, the AIDS Center, and the Research Institute on Addiction contributed enormous amounts of time in preparation, interviewing, taking and testing blood specimens. And, Save the Children's drivers played a vital role in transporting the blood specimens for testing as needed. Moreover, all persons involved in these activities did it with compassion and concern for protecting the rights of IDUs. To help with aspects of quality control and improvement in the data collection process, Rusudan Telia, Nadio Ravadze, Maya Tsiramua and Maya Robakize were hired as independent consultants. Their recommendations will be extremely beneficial for repeated surveys. The Institute for Polling & Marketing, which created the behavioral surveillance database, was extremely flexible and professional.

If all were told, the number of authors on the report would fill one page. Many people have read, and reread, drafts of the report and made worthy contributions. When the time came for final revisions, Charlie Kaften, Save the Children's Field Office Director, devoted his time and effort to conduct the editorial review. Nonetheless, any flaws that remain in the report are solely of the authors mentioned.

Translating any document, especially a report written with technical health and statistical expressions, is challenging. Nonetheless, Irma Khvedelidze has provided a high-quality version of the report in Georgian; this will make the report accessible to a wide Georgian audience interested in understanding how to improve services and treatment for IDUs.

Ultimately, the SHIP Project must recognize those who were willing to give of their time, stories, and blood to make this report possible–the IDUs. It is from their willingness to share in this endeavor that a positive future for all IDUs, and Georgia as a whole, is achievable.

Table of Contents

List of Figures

List of Tables

Acronyms

AIDS – Acquired Immune Deficiency Syndrome
AIDS Center – Infectious Diseases, AIDS & Clinical Immunology Research Center
BBPS – Behavioral and Biomarker Prevalence Survey
BPU – Bemoni Public Union
BSS – Behavioral Surveillance Survey
ELISA – Enzyme Linked Immunosorbent Assay
CSP – Commercial (male or female) Sex Partner
FSW – Female Sex Worker
GEL – Georgian Lari (exchange rate of 2.2GEL = 1USD at the time of this report)
HIV – Human Immunodeficiency Virus
IDP – Internally Displaced Person
IDUs – Injecting Drug Users
IPM – Institute for Polling & Marketing
MSM – Men who have Sex with Men
NGO – Non-Government Organization
NI – Research Institute on Addiction (Narcology Institute)
RDS – Respondent Driven Sampling
RPR – Rapid Plasma Reagent
SC – Save the Children
SHIP – STI/HIV Prevention
SPSS – Statistical Package for the Social Sciences
STI – Sexually Transmitted Infections
TPHA – *Treponema pallidum* Hemaggultination Assay
UNAIDS – United Nations AIDS

Definitions

Anonymous-linked testing – testing where no names are taken but results are linked to a number that only the participant knows.

Consistent condom use – Use of condoms every time during sexual relations with individuals in high-risk situations (e.g., using condoms every time with causal sexual partners; with sex workers; or, if condom user has HIV or other STI, with their regular sexual partner, such as spouse or steady girlfriend/boyfriend).

Drug paraphernalia – bottle, spoon, boiling pan, container, cotton filter.

"Extreme need" with/out help – this is a form of self-treatment used in Georgia among IDUs that is similar to the practice referred to as "cold turkey" in the US; that is, a complete self-termination of drug use. "Extreme need with help" is when a family member or friend assists the IDU with the complete self-termination of drug use.

Gathering place – a setting where a group of IDUs meet to inject drugs that may or may not involve the sharing of needle/syringes or injecting equipment. Also, this setting may change periodically.

High-risk behavior – Any behavior that puts an individual or individuals at increased risk of contracting HIV/STI or transmitting HIV/STI to another individual (e.g., having multiple sex partners without using condoms consistently; sharing used non-sterile needles, syringes or other devices used to prepare the injecting drug among IDUs).

Non-regular (casual) sex partner – A sex partner for less than one year who is not a spouse, live-in partner, or sex worker.

Regular sex partner – A spouse, live-in partner or sex partner for one year or more.

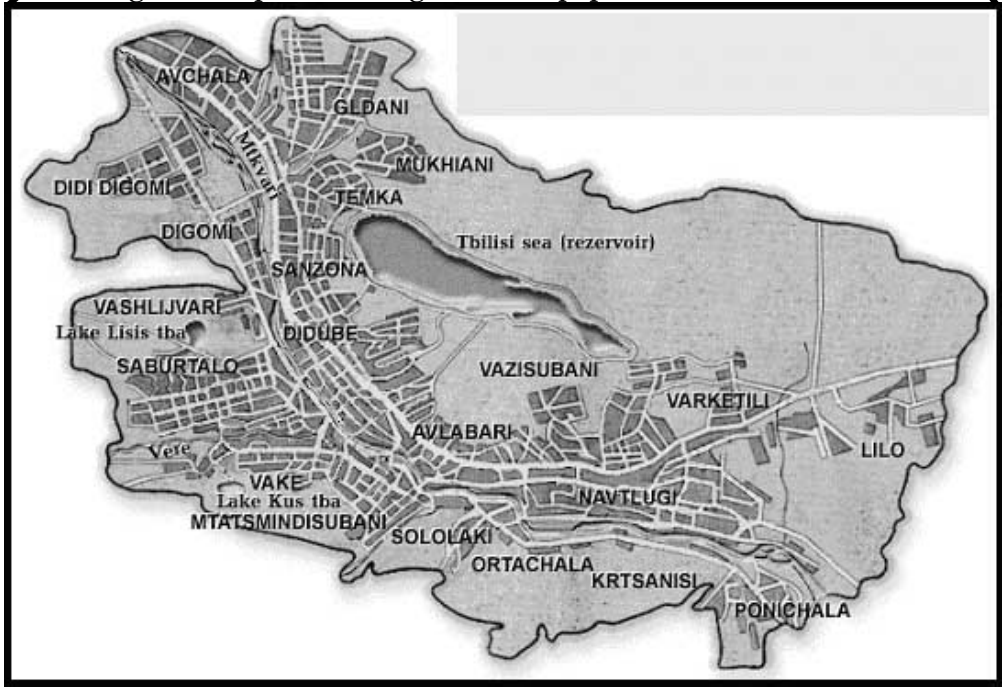
Sharing needles and/or injecting equipment – Reusing needles, syringes or other injecting equipment with other IDUs without properly sterilizing the equipment.

SHIP Partners – Tanadgoma and Bemoni Public Union, with close collaboration with the Infectious Diseases, AIDS & Clinical Immunology Research Center (AIDS Center) and Narcology Institute.

"Switched drugs" – this refers to the substitution of one drug for another. More often, drug substitution occurs when the usual drug injected is not available or the IDU cannot afford it.

Figure 1: Map of Georgia; population est. - 4.4 million.

Figure 2: Capital of Georgia, Tbilisi; population est. - 1.3 million.



Executive Summary

This report is the first behavioral and biomarker prevalence surveillance (BBPS) conducted in Georgia among injecting drug users (IDUs). It will serve as a baseline measurement of different risk behaviors of IDUs for the STI/HIV Prevention (SHIP) Project and other HIV/AIDS prevention activities in Georgia.

Using a chain-referral method of respondent driven sampling (RDS), with an initial 25 "seed" IDUs, a total of 302 IDUs were recruited, or came in voluntarily, and subsequently interviewed in the capital of Georgia, Tbilisi. The interviewing occurred from 9 October to 11 November 2002. The interview was conducted face-to-face by trained staff from the AIDS Center, the Narcology Institute (NI), and Bemoni Public Union (BPU) in Georgian or Russian, depending upon which language the respondent preferred. Questions were asked regarding high-risk behaviors, knowledge of STIs and HIV/AIDS, and use of health services. In addition, each IDU was asked to provide a blood specimen for an anonymous-linked test for syphilis and HIV. Of the 302 IDUs interviewed, tests were conducted on 282 samples for STI and HIV.[1]

IDUs in this study were almost exclusively men, as only two female IDUs participated. Slightly more than three-fifths (81.6%) of IDUs were between 20 to 39 years of age. Few IDUs were below 19 years of age or younger (6.3%) or 40+ years of age (12.0%). Most of the IDUs are well educated. Almost one-half (52.3%) had graduated with a university or technical degree, with 17.7% having started but not completed their university degree. Only 2 (0.7%) had not completed their secondary schooling. Few (2%) are internally displaced persons (IDPs) from Abkhazia or South Ossetia, which is below the proportion of young IDP men in the general population. Moreover, the respondents in the study are quite mobile, with 48.0% reporting they had left Tbilisi for more than one month in the past year. A total of 28 IDUs (or 5.3% of all IDUs) had visited Ukraine and Russia in previous years, two of the highest-risk countries for HIV nearest Georgia, and reported sharing either needles, syringes or injecting equipment while there.

The age at which IDUs started using and injecting drugs appears to be getting younger. Of the youngest age group (15-24 year olds), 23.8% started *using drugs* when they were less than 15 years of age compared to only 2.8% of those IDUs 40+ years of age. When asked at what age they began *injecting drugs*, almost 60% of the youngest age group started when they were less than 20 years of age, compared to 33.3% of IDUs 40+ years of age.

Virtually all (99.7%) IDUs had heard about HIV and AIDS. Only four male IDUs, one from each age group, had not heard of HIV/AIDS. When asked if they knew a person with HIV/AIDS, slightly more than two-thirds (69.9%) did know someone with HIV/AIDS, with 17.6% having a relative or close friend with HIV/AIDS.

Four out of every five IDUs (80.6%) stated that it is possible to take a confidential HIV/AIDS test in their neighborhood or town. There was little difference in the percentages by age group in stating this. Nonetheless, only 1 out of every 5 (20.1%) IDUs has taken a voluntary HIV test and received the results. Or, in other words, almost 80% of the IDUs have not been tested, and it is generally the youngest IDUs that have not been tested.

[1] Of the total 20 missing (302-20=282), 18 IDUs refused to provide a blood specimen and 2 specimens could not be tested due to technical problems.

Virtually all the IDUs (99.0%) reported to have been sexually active in the last 12 months. The largest percentage of these IDUs reported to have had sex with regular partners (82.4%), followed by non-regular (casual) partners (60.8%), and female sex workers (48.4%).

A little more than two-thirds (67.2%) of the respondents have used a previously used needle or syringe. When asked if at the last injection they had used a previously used needle or syringe, overall 22.7% of IDUs reported that they had. There is a statistically significant difference by age group. Almost 2 out of every 5 IDUs (37.5%) under 25 years of age, declining to only 1 out of every 15 (6.7%) of those 40+ years of age, had used a previously used needle or syringe at their last injection. Thus, younger IDUs are more likely to use a previously used needle than older ones.

The overwhelming majority of respondents received information about HIV/AIDS from television (94.3%) and magazines/journals (81.1%). However, friends and relatives are a more important source of information for younger than older IDUs. Slightly more than one-half (55.8%) of IDUs from 15-24 years of age identified friends and/or relatives as an important source of information about HIV/AIDS, compared to a low of 29.4% of IDUs 40+ years of age. It is interesting to note that a higher percentage of younger IDUs (33.7%) reported turning to healthcare providers for information about HIV/AIDS than respondents 40+ years of age (17.6%).

Conclusions

- There is a significant amount of sharing of injecting equipment and other related equipment reported by the respondents; 2 out of every 5 IDUs under 25 years of age had previously used a needle or syringe at their last injection. Moreover, the lowest percentage of IDUs that attempted to "clean" the needle or syringe was lowest for the youngest age group. This is in contrast to the older IDUs who were more cautions about sharing and using previously used needles and syringes. When asked if they ever had used a previously used needle/syringe, 67% of the respondents indicated that they had.

- About 10% of IDUs reported sharing a needle/syringe in the last week with a sexual partner, about 5% with their usual sexual partner, and about 5% with a sexual partner they did not know. This suggests that injecting drugs is more common among females than the proportion of female IDUs recruited in this survey. Women drug users in many locales are often socially isolated. It is not uncommon for female IDUs to have heightened levels of stigma and associated shame and guilt. Therefore, they are less forthcoming about their use.

- In addition to drug taking risk behavior, there are several findings in the BBPS that indicate risk behavior for sexual transmission of HIV. The age for first sexual contact is increasingly beginning at a younger age among IDUs in Tbilisi, and there is low reported condom use with regular partners. Moreover, it is the youngest age group, not the older age groups, that have more casual and sex-worker partners. The youngest age group reported having sex with, on average, 5.3 sex workers in the previous 12 months. Of these youngest IDUs who have sex with a sex worker, only two-thirds reported always using a condom.

- Strategies for changing behavioral practices in the IDU population will need to focus on a) reducing needle, syringe, drug paraphernalia-sharing practices; b) reducing unprotected sex; and c) safe needle disposal. In addition to these interventions directed at the individual, interventions addressing their social structures/networks, drug-taking norms, as well as the risk environment for drug use that makes it unsafe, is essential.

- Until IDUs begin using a new needle or syringe for each injection, a greater emphasis must be placed on informing IDUs how to better clean previously used needles and syringes prior to injecting and not sharing drug preparation equipment.

- Virtually all (95%) IDUs knew that injecting with a used needle or syringe transmitted the HIV virus. Thus, for those IDUs that share needle/syringe, this practice does not occur from ignorance but represents a ritual based on trust, as most sharing occurs with someone they know (an acquaintance or another drug addict). Moreover, a large percentage of IDUs share drug paraphernalia other than needles and syringes; however, the degree to which IDUs know this practice is also a high-risk behavior is unknown. While not captured in this data, interviewers reported that the IDUs were surprised that the sharing of drug paraphernalia was also risky. Thus, a greater effort needs to be made at informing IDUs that sharing of all injecting equipment, not just used needles and syringes, can transmit HIV.

- A large majority (87.7%) of IDUs knew that the correct use of a condom could protect one from the transmission of the HIV virus. However, almost one-fifth of IDUs that had sex with a sex worker did not use a condom at their last sexual encounter and slightly more than one-half did not use a condom at their last sexual encounter with their casual partner. This indicates that there is a core group of IDUs that do not use a condom for high-risk sex.

- Almost three-quarters of IDUs have never taken treatment for drug use. A significantly higher percentage of younger IDUs have never received treatment. This may indicate that younger IDUs do not consider their drug use as an addiction that requires treatment. Outreach efforts should convince younger IDUs to receive treatment before their drug use becomes an addiction.

- For those IDUs that attempt detoxification, almost two-fifths do so by using an "extreme need" method. When they do use the "extreme need" method, most do so without help. It should be further investigated whether this form of self-detoxification represents lack of access to detoxification services, or whether there is a stigma or other social or cultural barriers to using detoxification services.

- IDUs reported that parents and spouses are the greatest influence on them to quit their drug abuse. For single IDUs, parents are most important; spouses are most important for married IDUs. For married IDUs, only a small proportion stated that their children had a major influence on them stopping their addiction. After parents and spouses, friends, neighbors and siblings were important influences on IDUs to quit their addiction. Only 15.6% of IDUs reported that nobody was an influence on them to quit their drug use. Thus, successful prevention strategies will also need to address these broader social networks of influence and support.

Recommendations

1. Multiple behaviors in the IDU population are putting them at risk for HIV infection, including shared drug solutions, needles, syringes and other injecting equipment; contamination of drug solution during distribution; and unprotected sex. Interventions must address all potential risk behaviors.

2. Behavior change communication interventions should be targeted at drug users and their families. Involving IDUs in the development of relevant messages and the distribution of these messages within their social networks of influence and support will increase the effectiveness of the message. While television was cited as the main source of HIV/AIDS information by IDUs, television information campaigns on IDUs for the general public can increase stigmatization of IDUs. Specific, explicit HIV prevention messages and materials for IDUs are best done at the interpersonal level through drug-user social networks.

3. Hepatitis B and C are prevalent infections in the IDU community. Education material should also address issues related to Hepatitis B and C. In addition, there should be complementary integration of the HIV prevention program and the Hepatitis B and C prevention program with, at a minimum, some cross training of personnel in transmission issues, counseling issues and referral network lists.

4. Voluntary HIV counseling and testing (VCT) should be enhanced, with adequate pre- and post-test counseling. Ideally, someone who also understands issues affecting IDUs should conduct the counseling. Testing can also assist in risk reduction counseling. Current HIV testing procedures in Georgia require a waiting time between the drawing of blood and the return of the test results. Piloting of rapid testing procedures for validity and client acceptability might increase the number of individuals getting HIV testing. VCT services should be made available though sites that provide other HIV prevention services to IDUs.

5. Based on reports of needle sharing with female injecting partners, there appears to be more female injecting drugs than originally thought. Female IDUs appear to be a hidden and isolated population in Georgia, and specific interventions will need to be developed to access them.

6. In order to create a more supportive environment for risk reduction, policy and legislative barriers should be addressed. In the short-term, public health officials and NGOs should negotiate with local authorities for a more pragmatic and flexible application of law and regulations. This would include, for example, a dramatic decrease in the risk of arrest for IDUs, if they are found carrying a needle, or to provide "free passage" for outreach workers and peer educators. In parallel, there should be a review of existing laws and regulations that impede effective implementation of HIV prevention strategies.

7. While not addressed in this survey, it is known from data from Russia and Thailand that incarceration can fuel the HIV epidemic in IDUs. As such, HIV prevention activities in prison settings need to be considered part of a comprehensive program, and regulatory issues in prisons should be explicitly addressed, as in item # 6 above.

8. Addressing sexual risk is also important. Reported condom use with commercial sex partners by IDUs was high, but for regular partners is was still low. Condom use with commercial sex partners must be reinforced, and condom promotion with regular partners needs to be emphasized. IDUs can play a critical role in the spread of HIV into the broader population through sexual transmission to sexual partners and through mother-to-child transmission (MTCT). Providing counseling to sex partners of IDUs on the importance of condom use would also be important. This could be accomplished in part through family planning and reproductive heath programs to help them develop skills in condom negotiation when they know or suspect that their sexual partners inject drugs.[2]

9. The majority of drug use/experimentation starts at adolescence during secondary and tertiary education. Those from the educational and public health institutions working with youth should address drug use prevention, as well as the specific risks associated with injecting drugs, as part of an overall effort to promote STI/HIV/AIDS awareness. Interventions and services should be made available for those youth already using drugs.

10. Interventions for IDU populations must be extended beyond Tbilisi. Based on information from the Research Institute on Addiction and data from the AIDS Center, injecting drugs is more widespread than previously thought. Moreover, IDUs are the most frequently represented in the HIV statistics.

11. A non-coercive, systematic surveillance of both behavioral and selected biologic markers of IDU populations (and other high risk groups) should be conducted throughout Georgia and repeated on a regular basis to monitor whether interventions are working.

[2] For example, in Manipur, a study conducted in 2000 found that 45% of the regular sexual partners of HIV-positive IDUs acquired the virus over a six-year period; in 1996-2001, most of the HIV-positive infants in Ukraine and the Russian Federation were born to mothers who were IDUs or sex partners of IDUs.

Summary of Indicators for IDUs in Tbilisi.

Indicator	Prevalence
Biomarker	
Reactive syphilis serology	1.4% (4/282)
HIV (ELISA with Western Blot confirmation)	1.1% (3/282)
Demographic Characteristics	
Gender	Male
Median age	27 yrs
Level of education	University (157/300) Secondary (88/300)
Marital status	Single (154/300)
Drug Use	
Median age of 1st drug use	18.5 yrs
Median age of 1st injecting	20.0 yrs
Most frequent drug injected last week	Heroin 64.9% (170/262)
Sexual Risk Behavior	
Median age at 1st sex	15.0 yrs (295)
Had regular sex partner in previous year	82.4% (243/295)
Used condom at last sex with regular partner	28.5% (70/246)
Had casual sex partner in previous year	60.8% (169/278)
Used condom at last sex with casual partner	55.1% (86/156)
Had sex with female sex workers in the previous year	48.4% (134/277)
Used condom at last sex with sex worker	83.5% (116/139)
Median number of sex partners (regular, casual, sex worker) last year	4 partners
Drug Use Risk Behavior	
Ever used a previously used needle/syringe	67.2% (203/302)
Shared needle/syringe in the last week	31.5% (64/203)
Percent that tried to clean the used needle/syringe	84.9% (45/53)
Primary method to clean used needle/syringe	86.7% (water)
Used shared injecting equipment in the last week	79.3% (172/217)
Use solution from a shared container	66.6% (144/216)
Inject drug diluted with someone else's blood	6.4% (14/217)
Can get/buy new (unused) needle/syringes whenever you need them	98.3% (294/299)
Location to get new needles/syringes	97.1% (pharmacy)
STI/HIV Knowledge, Experience and Practices	
Aware of HIV	98.7% (301/302)
Know person that has/had HIV	69.9% (211/300)
Main source of information about HIV/AIDS	94.3% (TV)
Correctly identify six means of transmitting HIV	14.9% (45/302)
Voluntary Counseling and Testing	
Voluntary HIV testing is available in the community	80.6% (241/299)
Had voluntary HIV test and received results	20.1% (60/299)
Social Influences and Treatment	
Person with major influence to continue injecting drugs	62.9% (no one)
Person with major influence to stop injecting drugs	51.0% (parents)
Percent that have never received treatment for drug use	72.5% (216/298)

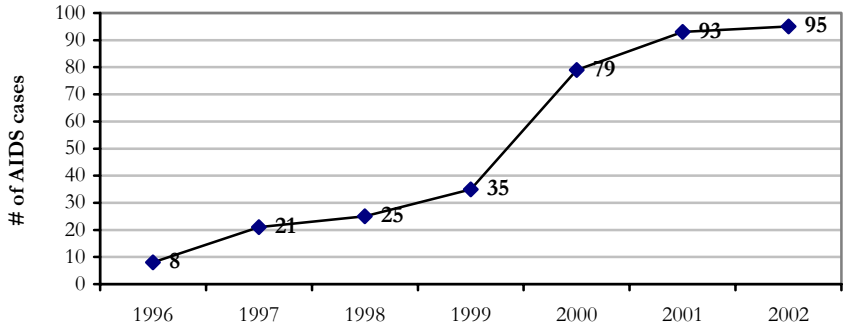
Introduction

Georgia's population is estimated to be approximately 4.4 million in a geographical area of 70,000-sq. km., bounded by the Black Sea, Russia, Azerbaijan, Armenia and Turkey. Much of the social structure supporting the health care system has become increasingly dysfunctional since the collapse of the former communist system. This has resulted in a general deterioration in the overall health status of the Georgian population. Transparent borders, allowing drugs to move freely throughout the region, and liberalization of sexual taboos (including gender-based norms) traditional to Georgians has led to increased levels of high-risk behaviors for female sex workers (FSWs) and injecting drug users (IDUs). This, in turn, has led to the acceleration in the spread of sexually transmitted infections (STIs) and HIV. The incidence of HIV has grown slowly and is presently mainly concentrated among IDUs. The wide availability of drugs, combined with the complex factors motivating demand, and the almost total absence of educational interventions to reduce demand, is likely to mean that IDU trends will continue in an upward direction for the foreseeable future. Also, the exponential growth in STIs, particularly among young people, is alarming in that STI is a cofactor in the sexual transmission of HIV, and the same risk behaviors perpetuate both infections.

WHO experts indicate that Georgia is on the verge of an HIV/AIDS outbreak, if adequate preventive measures are not taken. At present, Georgia falls within the category of countries classified as low HIV prevalence, defined by UNAIDS as having less than 5% infection in all groups, with a concentrated epidemic among high-risk groups that includes IDUs and FSWs. The first HIV diagnosis in Georgia was made in 1989. As of April 2003, a total of 413 HIV cases had been registered; 353 are males and 60 are females, ranging from 21 to 40 years of age.[3]

The trend since 1996 has seen an increase in the number of AIDS cases (see Figure 3). In the first quarter of 2003, 38 cases were registered, which is double the number of cases registered in the same quarter of 2002 (19 cases). However, STI/HIV data suffer from weak surveillance systems, which is likely to have resulted in widespread under-reporting. Moreover, the anecdotal reports of recent increases in the rates of STIs indicate a future potential for HIV to spread more rapidly among a wider population through sexual contact.

Figure 3: Number of New AIDS Cases from 1996 to 2002.



[3] Infectious Diseases, AIDS and Clinical Immunology Research Center, Annual Report, 2002. Unpublished.

The actual number of persons living with HIV in Georgia may be closer to 2000 persons.[4] IDUs account for 70% of the registered HIV cases in Georgia; heterosexual contacts for 25% (1/3 of these heterosexual contacts were with known IDUs); homosexual contacts for 2.9%; 0.9% were blood recipients; 0.7% was from vertical transmission; and 0.5% was from unknown causes.[5]

In the opinion of some local experts, the actual number of drug abusers in Georgia exceeds 150,000 to 180,000 (or 3.1% to 3.8% of total population).[6] Therefore, based on present conditions, a future HIV epidemic among IDUs, particularly among those in prison, cannot be precluded, given the high prevalence of needle sharing and unprotected sex among IDUs.

Governmental and non-governmental organizations in Georgia, as well as the international donor community, have responded to the early HIV epidemic with pilot interventions. Despite the political support for such interventions, an effective comprehensive system of prevention is yet to be established in Georgia or the Caucasus region as a whole.

Even though Georgia is considered a low prevalence country for HIV/AIDS, there is a great danger in equating low prevalence with low priority for HIV prevention.[7] The economic conditions in Georgia have not improved over the last several years. With the rapid decline in the socio-economic situation and increased social inequality, there has been an increase in stress, depression and hopelessness among individuals. This environment provides for the conditions for greater HIV transmission due to increased high-risk behaviors, such as drug use. Moreover, bankrupt state and regional budgets mean few resources for prevention and care.

Methodology

The Behavioral and Biomarker Prevalence Survey (BBPS) was approved by, and conducted in cooperation with, the Infectious Diseases, AIDS and Clinical Immunology Research Center (AIDS Center), which has been designated by the government as the primary HIV/AIDS research and treatment institution in Georgia.

Ethical Issues

The survey investigators were cognizant of the fact that the individuals participating in this study were at some risk for social harm should they be identified as part of the target group. This survey was designed to provide maximum protection for the participants, yet at the same time provide individual and community benefits. The ethical issues that have been taken into consideration are:

---

[4] USAID: Leading the Fight Against HIV/AIDS, August 2001, www.usaid.gov/pop_health/aids/country georgia.html.

[5] Infectious Diseases, AIDS and Clinical Immunology Research Center, Annual Report, 2002. Unpublished.

[6] Narcology Institute, Annual Report – 2002. Unpublished.

[7] Mills, S. "Back to behavior: prevention priorities in countries with low prevalence." AIDS 2000; 14 (supplement 3): S267-73.

- Participation in this survey was voluntary. Participants were free to withdraw at any time and were informed that refusal or withdrawal would not affect services they would normally receive.
- No names were recorded. All documentation is anonymous, linked only by a study number.
- Study staff were trained in discussing sensitive issues and protecting participants' confidentiality and human rights.
- All individuals identified with a sexually transmitted infection were offered counseling and free treatment.
- Recruitment of participants was done only by NGOs already working with the population or by the target population themselves.

Respondent Driven Sampling

Attempting to survey IDUs with traditional survey methods is problematic, since as a "hidden population" no sampling frame exists.[8] Moreover, it is imperative to adhere to strict confidentiality and ensure anonymity. At the same time, to achieve valid and reliable results for the SHIP Project's activities, the methodology had to, as much as possible, provide an unbiased (random) and representative sample.

Currently, one of the most accepted methodologies to achieve a relatively unbiased sample with no sampling frame, while allowing for anonymity, is Respondent-Driven Sampling (RDS).[9] RDS is based on the principle that members of a hidden population are best able to access their own peers, and if incentives are provided, they will recruit a diverse set of individuals.[10] It utilizes a chain-referral method that produces a relatively independent sample of the initial subjects from which sampling begins. The method is modified with the introduction of an incentive system of secondary rewards for recruiting others into the study. Thus, as a result, it does not matter whether the initial sample is drawn randomly.

Data collection

(1) The SHIP Partner organizations recruited 25 known IDUs who served as the "seeds." In an attempt to diversify the IDUs recruited, each Partner selected the "seed" IDUs from different injecting groups taking care to avoid selecting individuals from the same group who inject together;

(2) These seeds were interviewed and then offered a financial incentive to recruit their IDU peers to take the same interview they had just completed. The incentive was 20 GEL[11], which partially could be used for transportation to the interview site;

(3) Each IDU recruited was offered an incentive of 15 GEL to recruit up to two other IDUs. Participants were rewarded both for completing the interview and for recruiting his or her peers into the research. These incentives provided a mechanism

[8] A sample frame is based on knowing the size and boundaries of the population.
[9] "Respondent-driven sampling: A new approach to the study of hidden populations." Social Problems, Volume 44, Number 2, (May) 1997. Douglas D. Heckathorn.
[10] "Extensions of Respondent-Driven Sampling: A New Approach to the Study of Injecting Drug Users Aged 18-25." AIDS and Behavior, Vol.6, No.1, March 2002.
[11] The exchange rate at the time of the study was 2.21 Lari to 1 USD. Thus, each IDU received the equivalent of $9 USD.

that created an expanding system of chain-referrals in which subjects recruited more participants, who recruited still more participants, and so forth, forming successive waves of recruitment (see Figure 4). Each IDU was limited to two recruits in order to ensure that a broad array of subjects would have an opportunity to recruit, thereby preventing the emergence of semi-professional recruiters, and to preclude turf battles over recruitment rights;

(4) To ensure that authentic IDUs were recruited, and not just individuals wanting some money, a verification procedure was followed. The verification procedure included a preliminary informal discussion regarding street names of drugs and prices, familiarity with drug preparation and injection techniques, and finally a visual inspection for recent "track" marks. If the interviewer was satisfied with the recruit's responses, the interview proceeded;

(5) Subject duplication was overcome by using a subject identification database recording subject's gender, age, ethnicity, and physical characteristics, such as height, weight, scars, tattoos, and some biometric measures;

(6) Eight of the 25 "seeds" accomplished 1 wave of recruitment, 1 "seed" accomplished 2 waves, and the remaining 16 "seeds" accomplished 3 or more waves of recruitment.[12] In addition, 30 IDUs voluntarily came in from hearing about the survey (see Figure 4 below);

(7) Sampling ended when the minimum target sample size of 300 IDUs was achieved.

Interviewing occurred from 9 October to 11 November 2002, approximately nine weeks. From these initial seed-persons, a total of 345 IDUs were recruited, and, due to "word of mouth," an additional 32 IDUs came in independently. However, of the 377 IDUs that were recruited, 75 were not interviewed because they could not demonstrate adequately that they were IDUs (as discussed in point 4 above). Therefore, a total of 302 IDUs were interviewed in this survey.

In addition, a tracking system was established using only identification numbers that provided a way to link the recruiting IDU with the IDUs he had recruited. For example, each IDU was given a coupon with their identification number in sequence, according to when they were interviewed. Any additional IDUs that were recruited by an IDU already interviewed (up to two) were required to accompany their recruiter to the interview site. Identification numbers were given to these recruited IDUs, and these identification numbers were then linked to the recruiter's identification number.

This linking of IDU recruiter and the recruited IDUs provided additional information on how well the RDS methodology encouraged IDUs to recruit other IDUs who are dissimilar to them either in age, injecting group, or type of drug used. The expectation is that, as the number of waves of recruitment increases, the more diverse the IDUs, and thus, the more "representative" the sample.

The survey instrument was a behavior study questionnaire for IDUs provided in the manual, *Behavioral Surveillance Surveys: Guidelines for Repeated Behavioral Surveys in Populations at Risk for HIV*, published by Family Health International (FHI). This tool was used for the study of risky sexual and related behavior among IDUs in several countries. The

[12] A "wave" consists of a succession of recruited participants. For example, wave-1 consists of participants referred by the "seed." Wave-2 consists of participants recruited by the first-wave participants, and so forth.

questionnaire was translated into Georgian and back into English. It was adopted after review, pre-testing and making modifications to fit the Georgian context. Next, the questionnaire was pre-tested in a focus group and during in-depth interviews with IDUs. A final version of a male and female questionnaire was also translated into Georgian.

The interview was conducted in Georgian and took, on average, 40 minutes to complete. In addition to answering the questionnaire, IDUs were asked to voluntarily provide a blood sample, on site, immediately following the interview. The sample was tested for syphilis serology and HIV infection. Of the 302 IDUs interviewed, only 18 refused to provide a blood sample to test for syphilis and HIV (see Table 1 in Appendix).

The blood test was anonymous-linked. Each IDU that volunteered to provide a blood specimen was given an identification number, which was recorded on the blood tube and the questionnaire. In addition, the IDU was given a card with the identification number and with the organization's telephone number and address. Of the 302 IDUs, a total of 282 blood specimens were tested.[13]

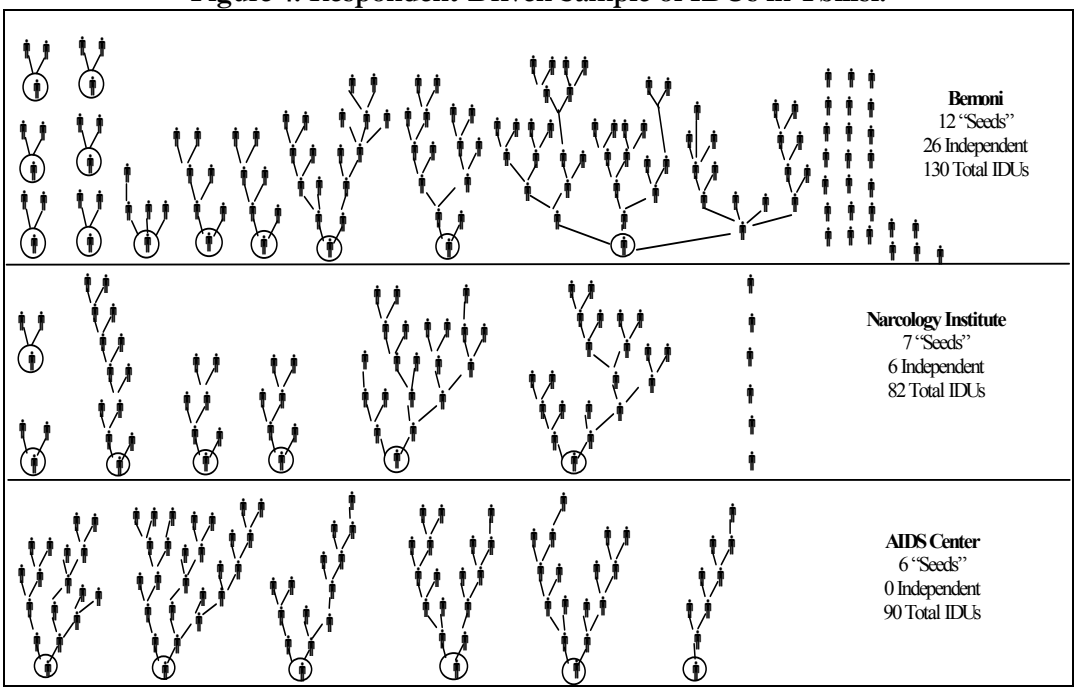
Blood specimens were sent to the Laboratories of Serology and Virology of the AIDS Center in Tbilisi for testing and the results were reported back to the organization (see biomarker section below for more details). The IDUs were asked to return with their identification card and their results would be provided.

Most (94.7%) of the interviews occurred in the offices of either Bemoni Public Union (BPU), the AIDS Center or the Narcology Institute, with only 5.3% occurring in the IDU's home.

The vast majority of IDUs respondents (91.7%) were identified through RDS, with a few (5.3%) identified through hospitalization at home. Only 3% were identified through other means, such as participation in a needle exchange program, client/friend referral, or referred by another organization (see Table 1 in Appendix).

[13] 18 IDUs refused to provide a blood specimen and 2 specimens could not be tested due to technical problems.

Figure 4: Respondent-Driven Sample of IDUs in Tbilisi.



Biomarker for HIV

The biomarker component of the survey involved the analysis of blood specimens at the Laboratories of Serology and Virology of the AIDS Center in Tbilisi.

HIV testing: HIV antibody testing was performed using a three-level enzyme-linked immunosorbent assay (ELISA) testing strategy. If a sample was reactive in the first ELISA (Genescreen Plus HIV Ag-AB, Bio-rad) test, the sample was retested two more times using another kit of ELISA. Samples were considered HIV antibody positive if they were reactive in two out of three tests. Any sample non-reactive to the first test was considered as HIV-antibody negative. HIV-antibody positive samples were tested with Western Blot (HIV blot, Genelabs) as the confirmatory test for HIV.

Syphilis testing: Serum samples were tested also for syphilis antibodies with rapid plasma regain (RPR, Human) test and T*reponema pallidum* hemaglitination assay (TPHA, Human). ELISA (ELISA TP IgG test [Nubenco]) tests were used for confirmation of syphilis-antibody positive samples.

Data Entry and Analysis

Save the Children (SC) contracted the Institute for Polling and Marketing (IPM), located in Tbilisi, Georgia, to develop the IDU database in SPSS (version 11). At the completion of the interviewing, IPM created a database complete with variables, variable names, and value labels. Two experienced individuals made the data entry; one who read the completed interview form and the other entering the data.

Once the SPSS database was completed, a random check was made of 5% of the completed interview forms. In addition, a frequency was run on all variables to examine values and labels. The "cleaned" database was submitted to SC for data analysis.

SC's Research Specialist, Larry Dershem, analyzed the data using SPSS (version 11). Percentages, means and medians were calculated to assess prevalence of high-risk behavior among IDUs. Bivariate relationships between age groups were examined using Chi-square test and Fischer's exact test.

Findings

IDU Portrait - Giorgi

In Tbilisi, there are both male and female IDUs of various ages and backgrounds that use different types of drugs and have different sexual behaviors. Moreover, they do not all have similar high-risk injecting practices. However, despite the plurality of IDUs, it is important when possible to put a "face" on all the data and statistics presented. Thus, the IDU Portrait presented below is meant to illustrate a typical IDU in Tbilisi.

Giorgi is 27 years of age, single, and has attended the Tbilisi State University. He began using drugs in his first year at the university (18 years of age) and has been injecting drugs for the last seven years. He began using drugs because of curiosity and to "fit in" with his friends. Of the various drugs available on the streets, Giorgi prefers injecting heroin and intermittently, opium. When he injects he generally does it in the apartment of a friend who lives alone, with friends-of-friends who also inject drugs. It is not uncommon for him to inject with needles and syringes used by others, especially his friends. When he does, he will use water to clean the needle and syringe. Besides using shared needles, he commonly will use a drug mixture that has been prepared in a container shared by others.

Giorgi was 15 years of age when he first had sexual intercourse, and in the last year he has had sexual intercourse with four different partners. These sex partners include his regular sex partner, but also casual ones and sex workers. With sex workers, he most likely will have protected sex using a condom; however, he will less frequently use a condom with his casual partner, and rarely use a condom with his regular partner.

Generally, he is quite knowledgeable about HIV/AIDS, which he has heard about from watching TV. He is aware that HIV/AIDS is spread through sexual contact and that condom use can prevent its transmission. Also, Giorgi is aware that having sex with only one faithful partner and switching to non-injecting drugs prevents the spread of the HIV virus. Despite knowing these prevention methods, he still uses previously used needles and syringes, has unprotected sex with multiple partners, and continues injecting. Moreover, he increases his chances of getting HIV by occasionally sharing needles and syringes with a few of his friends who recently traveled to Ukraine and Russia and had injected drugs with shared needles and syringes.

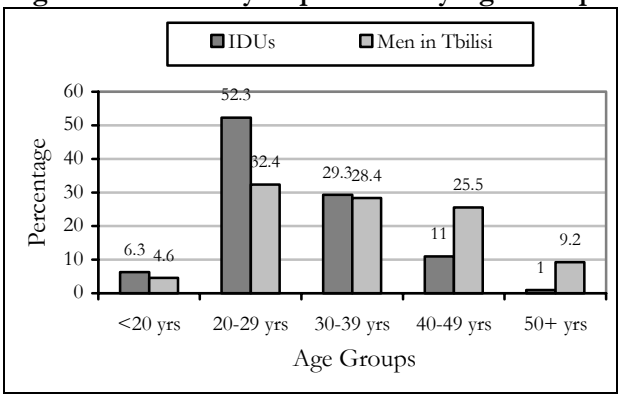
Although Giorgi knows that voluntary testing of HIV/AIDS is available in his community, he has not taken the test, nor has he sought treatment for his drug use. He does not believe that any one person has a major influence on him continuing his drug use; then again, he acknowledges that his parents might have the greatest influence on him quitting.

Demographic and Social Characteristics

Virtually all (99.3%) IDUs interviewed are men (Table 2 in Appendix). Only two women were identified in the RDS methodology. Since there are only 2 women included, the narrative of this report will concentrate on males.

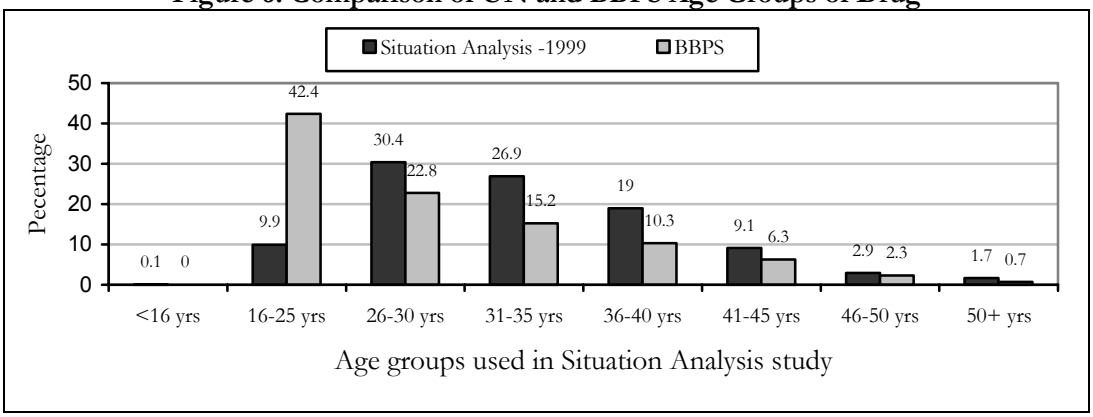
Slightly more than one-half (52.3%) are between 20-29 years of age, with the next largest percentage (29.3%) of IDUs 30-39 years of age.[14] Few IDUs are younger than 20 years of age (6.3%) or 40+ years of age (12.0%). The mean age is 28.8 years, with a median of 27 years of age.

Figure 5: IDU study respondents by Age Groups.



In February 2002, in a representative survey conducted in Tbilisi of 589 households that included 1,726 individuals, 535 were males between 17 and 53 years of age—a similar age range as the IDUs in the BBPS. The largest difference between IDUs and males in the general population is that a greater percentage of IDUs are between 20-29 years age (52.3% vs. 32.4%, respectively).

Figure 6: Comparison of UN and BBPS Age Groups of Drug



Comparing the age categories used in a study in 1999 of drug users (see Figure 6 below), a significantly greater percentage of those 16-25 years of age were included in the present BBPS than in the 1999 Situation Analysis study of IDUs.[15] This difference may well be due to using different survey methodologies. The Situation Analysis surveyed IDUs registered by the Ministry of Internal Affairs, whereas this survey was a voluntary, peer-

[14] In a rapid appraisal in Yerevan, conducted in 2002, 56% of IDUs were between 19-30 years of age. Cited from The HIV/AIDS Epidemic in Armenia, http://www.ilo.ru/aids/docs/dec02/cis/Armenia-eng.pdf accessed 12 April 2003.

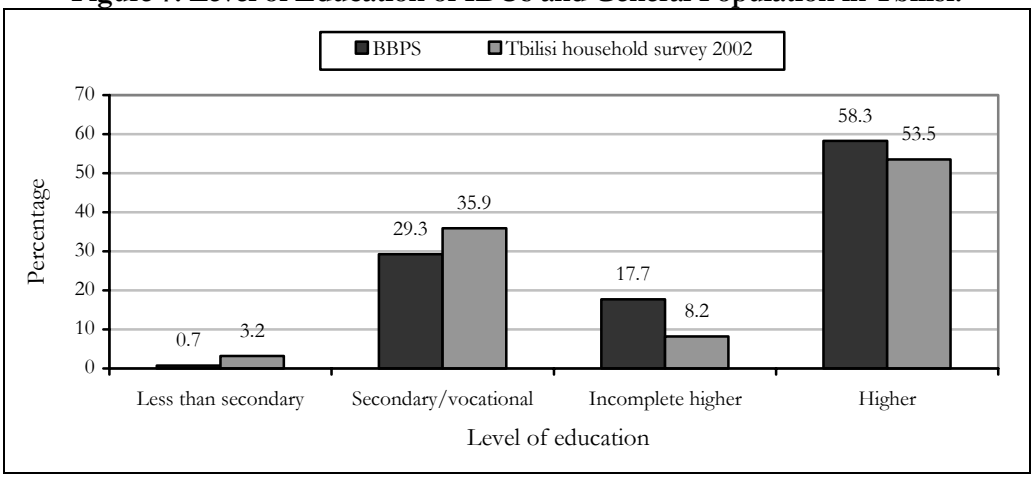
[15] Situational Analysis on HIV/AIDS in Georgia, UNAIDS, UNICEF and the Georgian AIDS and Clinical Immunology Research Center, 2001, Tbilisi, Georgia.

recruited study. Thus, younger, non-addicted IDUs were not surveyed in the Situation Analysis study but have been included in this study.

Ethnically, the majority of IDUs are Georgian (93.0%), with only a small percentage being Armenian (4.3%) or of another ethnicity (2.6%). The IDUs are well educated. Slightly more than one-half (52.3%) have completed a university degree, with 17.7% having an incomplete university education and 29.3% completing either secondary or vocational education.

In the representative survey conducted in Tbilisi in February 2002 mentioned above, IDUs are a little better educated than males of similar age in the general population (see Figure 7). The largest difference is that a greater percentage of the general population has completed secondary schooling and/or vocational training (35.9% vs. 29.3%, respectively), whereas a greater percentage of IDUs have an incomplete university level of education (8.2% vs. 17.7%, respectively).

Figure 7: Level of Education of IDUs and General Population in Tbilisi.



In Georgia there are approximately 250,000 internally displaced persons (IDPs) from Abkhazia and Ossetia. When the IDUs were asked, 2.0% reported to be an IDP; 3.3% refused to answer. According to data from the Ministry of Refugees and Accommodations, there are 30,215 male IDPs between 16 and 59 years of age in Tbilisi. Of the general population, there are an estimated 350,000 males in Tbilisi between the ages of 16 and 59. Thus, male IDPs represent approximately 8.6% of the males in Tbilisi. Since only 2.0% of male IDUs are IDPs, this suggests that male IDPs are not disproportionately IDUs.

Almost all IDUs (97.3%) currently live in Tbilisi and have lived here, on average, for 12 years. A small percentage (2.4%) of the IDUs live in another city or town in Georgia, with only 1 (0.3%) living in Russia. When asked if they had left Tbilisi for more than one month in the last year, slightly less than one-half (48.0%) had done so.

Of the male IDUs, 51.3% have never been married. These single male IDUs are, on average, 24 years of age and the majority of them (81.8%) live with their parents (see Table 3 in Appendix).

The next largest percentage (39.7%) of male IDUs are married and are, on average, 34 years of age. The overwhelming majority (98.3%) of the married IDUs live with their spouse and parents.

Only a small percentage (8.7%) of male IDUs is either divorced or separated, and they are, on average, the oldest male IDUs, with the average age of 34 years. Most of these divorced/separated male IDUs either live with their parents (42.3%) or alone (34.6%). There was only one male IDU who is a widower and he lives alone.

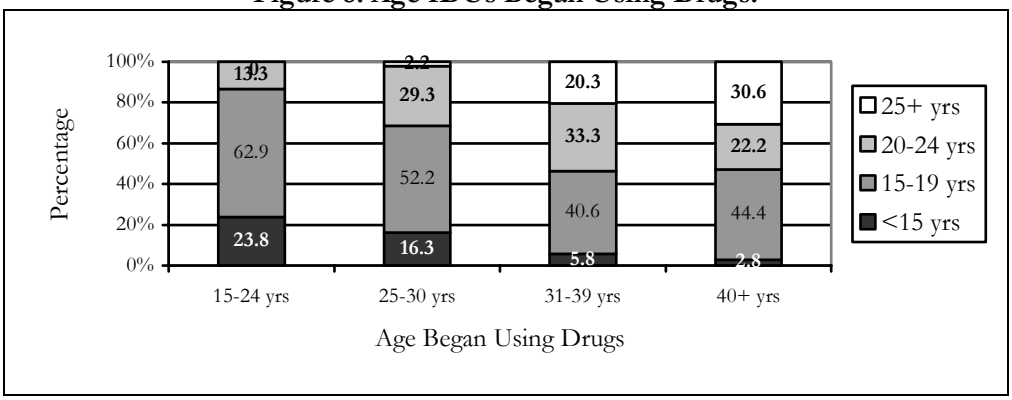
Of the female IDUs, one is married and the other is divorced/separated. The married female IDU lives with her spouse and parents; the divorced/separated female IDU lives alone.

Alcohol and Drug Use

When asked how often, over the last month, they had consumed alcohol (beer, wine, vodka, etc.), 7.0% reported everyday, with 41.7% reporting more than once a week. About 1 out of every 5 IDUs (19.3%) reported never consuming alcohol.

Male IDUs have been using drugs for, on average, 10 years (10.4). This is slightly longer than the 7 years, on average, for the two female IDUs (presented in Table 4 Appendix). It is not too surprising that older IDUs have been using drugs longer than younger IDUs. The youngest age group of IDUs, 15-24 year olds, has been using drugs on average for 4.9 years, compared with 9.6 years for the 25-34 age group, 13.5 years for the 31-39 age group, and 22.1 years for IDUs 40+ years of age.

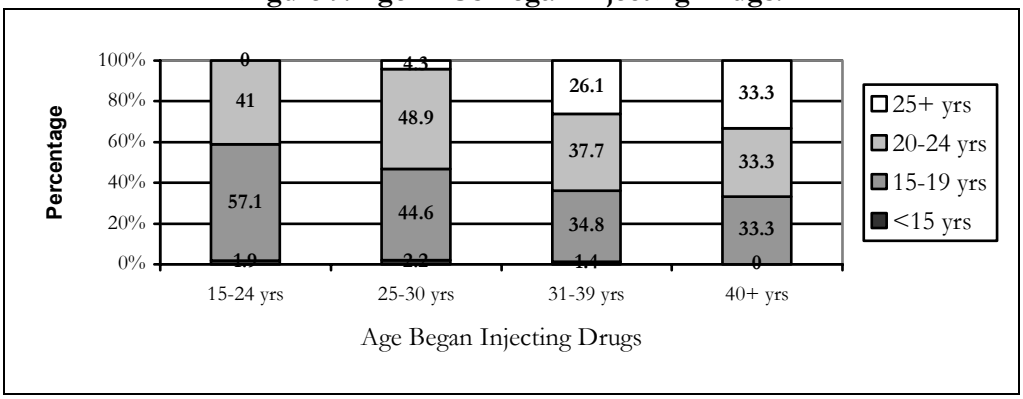
Figure 8: Age IDUs Began Using Drugs.



Almost three-quarter (76.0%) of all male IDUs began using drugs between 15 to 24 years of age. However, there is a statistically significant association between a male IDU's age and the age at which he began using drugs. When asked at what age they began using drugs, 23.8% of youngest IDUs (15-24 year olds) started using drugs when they were less than 15 years of age, compared to only 2.8% of IDUs who are 40+ years of age. Moreover, 62.9% of the youngest IDU age group began using drugs when they were between 15 to 19 years of age, compared to only 44.4% of IDUs 40+ years of age. This indicates that drug use in Tbilisi among males is starting at an increasingly younger age than it did in the past.

A vast majority (87.0%) of all male IDUs began injecting drugs between 15 and 24 years of age. However, again, when examining for age differences, there is an increase in injecting drugs at a younger age. When asked at what age they began injecting drugs, almost 60% of IDUs in the youngest age group started injecting drugs when they were less than 20 years of age, compared to 46.8% for IDUs 25-30 years of age, 36.2% for IDUs 31-39 years of age, and 33.3% of IDUs 40+ years of age.

Figure 9: Age IDUs Began Injecting Drugs.



On the other hand, when asked if they injected in the last week, the percentage increases with age. That is, 57.1% of IDUs less than 25 years of age injected last week, increasing to 67.4% for those IDUs 25-30 years of age, 75.4% for those IDUs 31-39 years of age, and 83.3% for those IDUs 40+ years of age.

Although a greater percentage of older IDUs injected last week, the number of drugs injected, on average, was not significantly different between the age groups. The overall average number of drugs injected by male IDUs last week was slightly more than one drug (1.4 drugs).

Slightly more than two-thirds (68.7%) of male IDUs had injected drugs in cities other than Tbilisi in the past 12 months. Slightly higher percentages of the younger age groups had injected drugs in another city than the two older age groups, but the difference is not statistically significant. For those IDUs that had injected in another city, the average was 2.2 cities. This ranged from 1.8 cities for the youngest age group to 2.3 cities for the oldest age group.

A little less than 1 out of 5 male IDUs (16.7%) injected drugs in another country in the last 12 months. The highest percentage of male IDUs that had injected drugs in another country was for the 25-30 age group; in addition, this age group had the highest average number (2.2) of countries in which they had injected drugs. This may be due to several reasons, such as: 1) younger IDUs or their families have more financial means to travel for leisure than older IDUs; 2) they are employed and traveling on business; 3) or they are seeking employment abroad but are not successful.

Ukraine and Russia, located near Georgia, are countries that have alarming rates of HIV infection. A total of 28 IDUs (or 5.3% of all IDUs) had visited these two counties in the previous year and reported sharing either needles, syringes or injecting equipment while there. Moreover, of the three IDUs that tested positive for HIV, two had traveled to Russia in the previous year and shared either needles, syringes or injecting equipment while there.

When asked if they had shared needles or syringes with others when they injected drugs in locations other than Tbilisi, 33.7% said that they had. The largest percentage that had (40.3%) was the IDUs who are 25-30 years of age, decreasing to 25.9% for IDUs less than 25 years of age.

Almost one-third (30.8%) of male IDUs allowed someone else to use their needle or syringe when they injected drugs in a location outside Tbilisi. Again, the age group with the highest percentage (38.8%) that allowed this was the 25-30 year olds. It is also interesting to note that, of the three IDUs that tested positive for HIV in this study, two had injected in other countries in the last year. One IDU had injected in both Ukraine and Russia. The other IDU had injected in Belgium, Italy and Russia.

Drugs Used In the Last Week

Almost all (90.1%) IDUs had used one or more drugs in the previous week, as shown in Table 5 in the Appendix. There was little difference in the percentages of IDUs using drugs in the previous week by age groups.

For those IDUs that used drugs in the previous week, the largest percentage (62.3%) of them used heroin, with a smaller percentage using marijuana (55.1%), opium (16.9%), tranquilizers (9.4%) or codeine (7.2%). A very small percentage of IDUs used other types of drugs in the last week.

The largest difference among the various age groups and the drugs used in the previous week is that, of the top four drugs used, larger percentages of the older IDUs used heroin, opium and tranquilizers in the previous week than the younger IDUs (52.5%, 12.4%, and 6.2%, respectively). On the other hand, a larger percentage (74.5%) of the younger IDUs used marijuana than the older IDUs.

On average, two drugs were used in the previous week. There was little difference in the average number of drugs used in the previous week, which ranged from 1.9 drugs for the youngest age group to 2.1 drugs for those IDUs over 30 years of age.

Overall, two-thirds (67.5%) of the IDUs had injected in the previous week (see Table 6 in Appendix). The percentage of IDUs that injected in the previous week increases with age. That is, 57.1% of IDUs 15-24 years of age injected in the previous week, increasing to 67.4% for those 25-30 years of age, 75.4% for those 31-39 years of age, and 83.3% for those 40+ years of age.

Of all the drugs injected in the previous week, the highest percentage of IDUs (64.9%) inject heroin. By age group, the percentage of IDUs injecting heroin in the previous week ranged from 58.4% for those under 25 years of age to a high of 81.7% for those 31-39 years of age.[16]

The next highest percentage (19.0%) of IDUs injected opium in the previous week. A smaller percentage of the youngest age groups (15.4% and 14.7%, respectively) injected

[16] In a rapid appraisal in Yerevan, conducted in 2002, 46.6% of IDUs used heroin, with 21.5% using opium. Cited from The HIV/AIDS Epidemic in Armenia, http://www.ilo.ru/aids/docs/dec02/cis/Armenia-eng.pdf accessed 12 April 2003.

opium in the previous week than the two older age groups (22.4% and 32.3%, respectively).

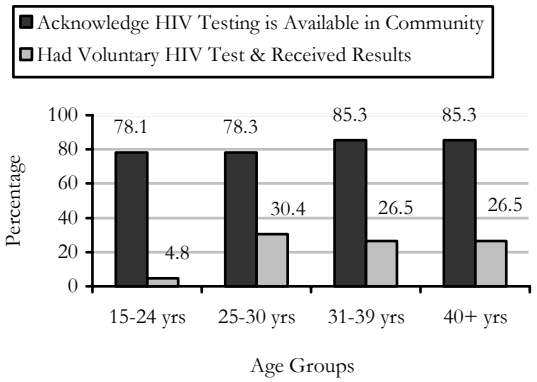
On average, those IDUs that had injected drugs in the previous week injected, on average, 1.4 drugs. The youngest age group injected in the previous week, on average, 1.3 drugs, increasing to 1.5 drugs for those IDUs 40+ years of age.

Two of every five (39.9%) IDUs had switched the drugs they used in the previous week (see Table 7 in the Appendix).[17] The highest percentages of IDUs that had switched drugs used in the previous week were those 25-30 (51.1%) and 31-39 (42.4%) years of age.

HIV/AIDS Knowledge and Testing Among IDUs in Tbilisi

Virtually all (99.7%) IDUs had heard about HIV and AIDS. Only four male IDUs, one from each age group, had not heard of HIV/AIDS (presented in Table 8 in the Appendix).

Figure 10: Acknowledge HIV Testing is Available in Community, Had Voluntary HIV Test, and Received Results.



When asked if they knew a person with HIV/AIDS, almost two-thirds (69.9%) knew of someone with HIV/AIDS. This appears to be quite high. The survey question seems to have solicited responses even if an IDU had "heard" about someone with AIDS. The more precise question, that is, if an IDU had a relative or close friend with HIV/AIDS, showed that 17.6% did. Additionally, there is a statistically significant association between sharing needles and knowing someone with HIV (ChiSquare = 7.12 [1df] $p<0.01$).

IDUs were asked six questions to test their knowledge of HIV/AIDS.[18] Overall, only 14.9% of all IDUs correctly answered all six questions. The question that was most frequently answered incorrectly was whether HIV could be spread through mosquito bites, followed by abstinence and meal-sharing.

The highest percentage (18.1%) of IDUs with correct answers on all six questions about HIV/AIDS was for those 15 to 24 years of age. The age group with the lowest percentage of correct answers (7.2%) was the 31-39 years of age group.

Of three additional questions about the spread of HIV, the lowest percentages of IDUs knew that breastfeeding could spread the HIV virus. The lowest percentage (34.3%) that

[17] "Switch" refers to the substitution of one drug for another. More often, drug substitution occurs when the usual drug injected is not available or the IDU cannot afford it.

[18] Correct condom use, one faithful partner, abstinence, mosquito bites (no), meal sharing (no), and switching to non-injecting drugs.

correctly answered this question was for the 15-24 year age group, increasing to 57.1% for those IDUs 40+ years of age.

Four out of every five IDUs (80.6%) stated that is was possible to take a confidential HIV/AIDS test in their neighborhood or town. There was little difference in the percentages by age group in stating this. Only 1 out of every 5 (20.1%) IDUs has taken a voluntary HIV test and received the results.[19] Or, in other words, almost 80% of the IDUs have not been tested.

As for age groups, there is a statistically significant difference whether they have taken a HIV test and received a result. Of the youngest age group, IDUs 15-24 years of age, only 4.8% have had an HIV test, which is a much lower percentage than all the other age groups.

Sexual Behavior Among IDUs in Tbilisi

Of the 295 IDUs that answered the question (7 missing cases), all of them reported to have had sex at some time in their life (see Table 9 in Appendix). The age at which they first had sexual contact was, on average, 15 years of age. By age groups, the average age for first sexual contact for the youngest age group was 14.6 years of age, with the average age for first sexual contact increasing to 15.8 years of age for the oldest age group. This difference is statistically significant ($F=7.23$, $p<.000$). Thus, the age at which first sexual contact occurs appears to be getting younger.

Again, virtually all the IDUs (99.0%) reported to have been sexually active in the last 12 months. Of these IDUs, the largest percentage reported to have had sex with regular partners (82.4%), followed by non-regular partners (60.8%) and sex workers (48.4%). Of the 291 IDUs that reported having been sexually active, the number of sex partners in the last year ranged from 1 (21.5%) to 100 (1%), for an average of 6.4 and a median of 4 sex partners.

Comparing age groups, the lowest percentage (70.6%) to have a regular partner was among the youngest age group (15-24 year olds), increasing to a high of 97.1% for the oldest age group. This difference was statistically significant (ChiSquare=19.68 [3df], $p<0.000$). Among the youngest age group, those who reported a regular partner had, on average, 1.9 regular partners, compared to 1.4 regular partners for the oldest age group. However, this difference was not statistically significant.

As for non-regular sex partners, the highest percentage of IDUs with non-regular sex partners was the 25-30 age group (68.6%), decreasing to 50.0% for the oldest age group. However, these differences were not statistically significant. Again, for those who had non-regular sex partners, the youngest age group reported the highest average number of non-regular sex partners (5.6) in the last 12 months and the oldest age group reported the lowest average (3.6). But again, these differences were not statistically significant.

In the last 12 months, the largest percentage (64.6%) of IDUs that reported having sex with one or more sex workers was in the youngest age group, with the percentage decreasing for each age group: 49.4% (25-30 years), 35.9% (31-39) and 21.9% (40+

[19] In a study of 424 IDUs in Moscow in 1998, it was reported that 61%-63% of IDUs had been tested for HIV. Cited in "HIV in central and eastern Europe," The Lancet, Vol. 361, 22 March 2003.

years). These percentage differences are statistically significant (ChiSquare=22.15 [3df], p<0.000). For those IDUs that reported having sex with one or more sex workers in the last 12 months, the highest average number of sex workers was for the 31-39 years of age group (5.3) and the lowest (3.6) was reported by the 40+ age group.

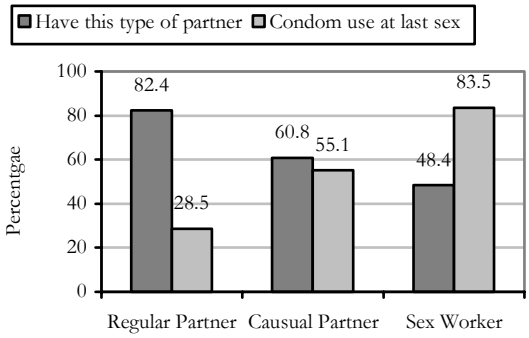
A very small percentage (2.0% or 6 IDUs) reported receiving money or drugs for sex. Of the age groups, the highest percentage (2.9%) was among those 31-39 years of age. The number of persons with whom these IDUs exchanged money and/or drugs in the last 12 months ranged from 1 to 12 persons. No further information was elicited as to who the sexual partners were or whether money or drugs were exchanged. All participants denied having male-to-male sex.

Condom Use Among IDUs in Tbilisi

Almost all IDUs (93.0%) had used a condom at some time (see Table 10 in Appendix). The lowest percentage of IDUs (88.6%) that had used a condom was for the oldest age group.

Of the three types of sexual partners in which condoms are used, the highest percentage of IDUs use a condom with sex workers (83.5%), followed by non-regular partners (55.1%) and regular partners (28.5%), as shown in Figure 11.

Figure 11: Percentage of IDUs With A Regular and Casual Partner, and/or Sex Worker, and Used Condom At Last Sex.



Although a relatively high percentage of IDUs who had sex with one or more female sex worker used condoms, the highest percentage (89.1%) that had done so was among the youngest age group. When asked how consistently a condom is used with their commercial sex partner(s), two-thirds (66.7%) of the youngest age group report "always," declining to only 28.6% for IDUs 40+ years of age. Thus, as mentioned above, although a smaller percentage of the older aged IDUs have sex with sex-workers, when they do, they are less likely to use a condom than the younger IDUs.

When asked about non-regular partners, slightly more than one-half (55.1%) of IDUs with one or more non-regular sexual partners in the previous year used a condom the last time he had sex with his non-regular partner. As with sex-workers, it is the oldest age group that is least likely to use a condom with a non-regular partner. That is, 23.1% of the oldest age group used a condom with a non-regular partner, compared to 62.3% for the youngest age group. Once more, when asked how consistently they use a condom with their non-regular sex partners, 41.0% of the youngest age group "always" used a condom, declining to 14.3% for those IDUs 40+ years of age. Almost one-third (28.6%) of the oldest age group that had a non-regular sex partner in the last 12 months reported that they never use a condom.

Of the IDUs with a regular partner, slightly more than one-quarter (28.5%) reported that they had used a condom during their last sexual encounter. Almost one-half (48.4%) reported that they never use a condom with their regular partner. There are few differences between the age groups in the percentages that used a condom during their last sex encounter with his regular sex partner or how consistently a condom is used during sex with his regular sex partner.

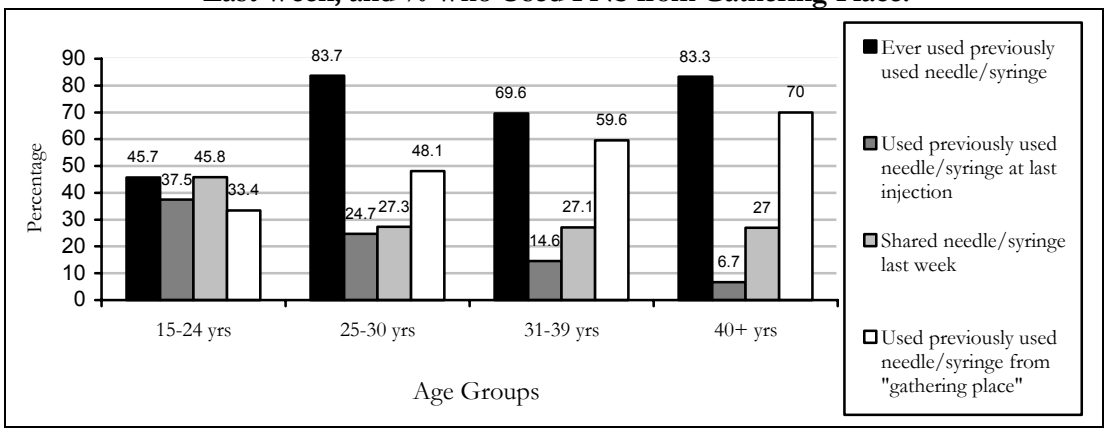
Needle/Syringe Sharing

A little more than two-thirds (67.2%) of IDUs have used a previously used needle or syringe[20] (shown in Table 11 in Appendix). As mentioned by one IDU during a focus group discussion with IDUs to test the survey instrument, *"I'm just lazy to go out every time. If I don't have a new [syringe], I use whatever is at hand. Besides, mostly we do it in company and often we don't have enough syringes. As it usually happens, we have to share drugs with somebody who joins us unexpectedly…I never refuse anybody who asks me to share."* Another IDU added, "*"Depends on the situation. Sometimes you have to share it. Drug addicts do not care what they use to get relief."*

Of the different age groups, 83.3% of the IDUs 40+ years of age had used a previously used needle or syringe, with less than one-half (45.7%) of IDUs under 25 years of age doing so. This difference is statistically significant (ChiSquare=38.96 [6df], p<0.000). Thus, older IDUs are more likely to have used a previously used needle or syringe.

When asked if at the last injection they had used a previously used needle or syringe, overall 22.7% of IDUs reported that they had. There is a statistically significant difference by age group (ChiSquare=24.17 [6df], p<0.000). Almost 2 out of every 5 IDUs (37.5%) under 25 years of age used a previously used needle or syringe at their last injection, declining to only 6.7% of IDUs 40+ years of age. Thus, younger IDUs are more likely to use a previously used needle than older IDUs. This was mentioned in the focus group discussions with IDUs. That is, older IDUs are more experienced in the use of needles and have needles readily available. As declared by a 50 year old IDU, *"Professional junkies take better care of themselves than beginners."* Another acknowledged, *"There is no time to look for another syringe. Besides, the 'professional' user takes care of himself. He has new syringes for himself but he does not think about the members of his entourage.*"

Figure 12: Percentage of IDUs That Have Ever Used a Previously Used Needle/Syringe (PNS). For IDUs That Had: % Who Used PNS At Last Injecting, % Who Used PNS Last Week, and % Who Used PNS from Gathering Place.



[20] This is slightly higher than the 55.5% of drug users that reported to have used injecting instruments already used reported in the Situation Analysis, 2001, (pg.38).

Of the IDUs that had previously used shared needles or syringes, 31.5% (65 of 203) had shared a needle or syringe in *the last week*.[21] They reported sharing their needle or syringe with, on average, 2.5 people. Of these IDUs, the largest percentage (45.8%) that had shared a needle or syringe was for the youngest age group. For all other age groups, approximately 27% had shared a needle or syringe with other people. There was little difference between the age groups for the average number of people with whom they had shared a needle or syringe within the last week.

Of the 65 IDUs that shared a needle or syringe in the last week, 57 were willing to identify with whom they shared. In rank order, it was generally with an acquaintance (71.9%), a drug "buddy" (59.6%), a stranger (12.3%), a drug trafficker (8.8%), a usual sex partner (5.3%), or an unknown sex partner (5.3%). For all age groups, except the oldest, most sharing occurred with an acquaintance, whereas for the oldest age group it was with another drug addict. The 12.3% (or 7 IDUs) that shared with a stranger and the 5.3% (or 3) that shared with an unknown sex partner indicates the links being made to other injecting drug groups.

Of the IDUs that had shared a needle or syringe in the last week, 47.2% "always" tried to clean them prior to use, with 15.1% "never" trying to clean them.[22] The largest percentage of IDUs that "never" tried to clean a used needle or syringe in the last week was for the youngest age group (29.4%). The largest percentage of IDUs that "always" cleaned a used needle or syringe was for the oldest age group (62.5%), with a low of only 35.3% for the youngest age group.

For those IDUs that had used a previously used needle or syringe, and tried to clean them, the largest percentage of them used water (86.7%), with a small percentage using something else, such as cotton or cotton with alcohol. The highest percentage of those trying other methods of cleaning a used needle or syringe was found among the youngest age group.

Almost one-half (51.1%) of IDUs that had used a previously used needle or syringe had also obtained it from a "gathering place." The percentage of IDUs that obtained a previously used needle or syringe from a gathering place increases with age. One-third (33.4%) of IDUs under 25 years of age had done so, increasing to 48.1% for 25-30 year olds, 59.6% for 31-39 year olds, and 70.0% for those 40+ years of age.

However, obtaining a previously used needle or syringe from a gathering place is not a consistent ritual for these IDUs. That is, 11.5% of IDUs that had obtained a previously used needle or syringe from a gathering place did so "always" or "nearly always." Nevertheless, the vast majority (80.8%) does obtain a previously used needle or syringe "sometimes" from a gathering place.

[21] In a study of 424 IDUs in Moscow in 1998, it was reported that 35%-41% shard injecting equipment. Cited in "HIV in central and eastern Europe," The Lancet, Vol. 361, 22 March 2003.

[22] The Situation Analysis reported (pg.39) that 15% of drug users surveyed never cleaned injecting instruments used by others.

Use of Needles and Syringes

During the last week, almost one-quarter (22.5%) had used a syringe that had been filled when they were not present (see Table 12 in Appendix). A slightly higher percentage of the oldest age group (28.6%) reported this occurring than the youngest age group (16.2%).

A slightly lower percentage (21.7%) of IDUs used a syringe that had already been used by someone else. There is little difference among the various age groups.

The overwhelming majority (79.3%) of IDUs shared drug-injecting paraphernalia (bottle, spoon, boiling pan, container, cotton filter).

Availability and Disposal of Needles and Syringes

Practically all (98.3%) IDUs stated that it is possible to get or buy new (unused) needles and syringes whenever they need them, as shown in Table 13 in the Appendix. This percentage was similar for all age groups.

The largest percentage (97.1%) of IDUs obtains new needles and syringes from pharmacies.[23] Although much less often, needles are obtained from friends (26.8%), other IDUs (22.1%), family or relatives (14.9%), or the hospital (12.3%). Age group differences show that the youngest age group of IDUs obtains new needles and syringes from only four sources (drug store, friends, hospital or sex partner), whereas the other age groups obtain them from numerous sources.

After using a needle and syringe for an injection, one-third (33.4%) throws them away in the garbage with a cap on the needle and 15.9% do so without the cap. Roughly one out of every five (19.5%) just throws them on the ground. Only three (1.0%) IDUs saved them to use at another time. A larger percentage of the younger age groups dispose used needles and syringes by throwing them on the ground. For example, 26.7% of IDUs below 25 years of age and 20.7% of IDUs between 25 to 30 years of age throw their used needle and syringe on the ground, compared to 13.0% of IDUs between 31-39 years of age and only 8.3% of IDU 40 or more years of age.

Medical Treatment Among IDUs

Approximately three-quarters (72.5%) of all IDUs have never received any form of treatment for their drug use. Almost one-quarter (21.5%) had received treatment, but they are not currently receiving treatment. Only 5.0% are currently receiving treatment. Few (1.0%) IDUs formerly received treatment and are currently receiving it.

The largest percentage (90.4%) of IDUs that have not received any form of treatment for drug use is for those IDUs under 25 years of age. The percentage of IDUs that have

[23] In a rapid appraisal in Yerevan, conducted in 2002, almost all IDUs purchased syringes from pharmacies. Cited from The HIV/AIDS Epidemic in Armenia, http://www.ilo.ru/aids/docs/dec02/cis/Armenia-eng.pdf accessed 12 April 2003.

never received treatment declines with age; that is, 78.0% for those 25-30 years of age, 56.5% for those 31-39 years of age, and 35.5% for those 40+ years of age. The largest percentage of IDUs currently receiving treatment, although quite small, is among those 40+ years of age (11.0%).

The types of treatment the IDUs have undertaken are quite diverse. The largest percentages of IDUs have received treatment through "detoxification with other drugs" (29.3%) and "extreme need" with help (26.7%).[24] Other types of treatment received included "hospital" (17.3%).

Overall, of those IDUs that have received treatment, almost one-third (29.3%) has received three different types of treatment. There was little difference in the percentages of the IDUs that have received two or more treatments by age group.

Slightly more than three-quarters of those IDUs that received treatment had received it in Georgia (5.4% in their home), with 21.5% receiving it outside Georgia. Although the number of cases is low, a larger percentage (33.3%) of IDUs under the age of 25 received treatment at home, compared to almost none for the other age groups.

Sources of Information About HIV/AIDS Among IDUs

The overwhelming majority of IDUs receive information about HIV/AIDS from television (94.3%) and magazines/journals (81.1%). This was consistent across all age groups.

Slightly less than one-half of IDUs identified friends and/or relatives as important sources of information about HIV/AIDS. Friends and relatives are more important source of information for younger IDUs. Slightly more than one-half (55.8%) of IDUs from 15-24 years of age identified friends and/or relatives as an important source of information about HIV/AIDS, compared to a low of 29.4% of IDUs 40+ years of age.

It is interesting to note that a higher percentage of younger IDUs (33.7%) turn to healthcare providers for information about HIV/AIDS than IDUs 40+ years of age (17.6%).

When asked if they had been given information in the last year on condoms or AIDS, less than one out of every three (29.2%) had. When information was received about condoms, it was primarily received by the younger IDUs. Of the youngest age group, 42.9% had received information, compared to only 8.6% of IDUs 40+ years of age.

Practically all (94.7%) IDUs received information about condoms from television. The next largest percentages obtained information about condoms from drugstores (62.0%), magazines/journals (56.0%), or radio (55.0%).

A greater percentage of the youngest IDUs obtain information about condoms from friends/neighbors (27.6%) and medical personnel (15.2%).

[24] "Extreme need" is a form of self-treatment used in Georgia among IDUs that is similar to the practice referred to as "cold turkey" in the US; that is, a complete self-termination of drug use. "Extreme need with help" is when a family member or friend assists the IDU with the complete self-termination of drug use.

Less than one-quarter (24.5%) of all IDUs have heard or seen information about a needle exchange program. The frequency of hearing about or seeing information about a needle exchange program increased with age. Only 14.3% of the youngest IDUs had heard or seen information about a needle exchange program, compared to 27.8% for IDUs 25-30 years of age, 29.0% for IDUs 31-39 years of age, and 38.2% for IDUs 40+ years of age.

IDUs were asked to identify people who have a major influence on them continuing or quitting their drug use. For almost two-thirds (62.9%) of all IDUs, no one had a major influence on them continuing their drug use. This was more prominent for IDUs 25-30 years of age (73.9%).

IDUs within the 31-39 age group reported the highest percentage (56.5%) to identify people with a major influence on them continuing their drug use. For those that identified a person who has a major influence on them continuing their drug use, the largest percentage identified their IDU partner (27.2%), with smaller percentages identifying friends/neighbors (17.8%) or school/classmates (4.0%).

As for those who have a major influence on them quitting their drug use, slightly more than one-half (51.0%) reported their parents. Other persons identified were a spouse (29.8%), friend/neighbor (20.9%), siblings (20.5%), or a school/classmate (17.6%).

Older IDUs reported spouses as a major influence on them quitting their drug use, whereas for younger IDUs it was siblings, friends/neighbors or schoolmates.

Conclusions

The BBPS surveillance survey was conducted as an activity within SC's SHIP Project, funded by USAID. It was conducted in order to establish a rigorous and replicable methodological design that would be able to provide high quality data on IDUs. The information gathered will, in turn, be used for advocacy work by the National AIDS Control Program and others. Furthermore, the survey was conducted to obtain critical data and information, as follows:

- Baseline information on indicators being promoted by UNAIDS in order to monitor the success of prevention programs;
- Additional information to supplement other formative assessments to determine those risky behaviors where prevention interventions should be directed.

In addition, many other positive outcomes were observed in this surveillance survey. The sampling methodology chosen for this survey, RDS, required that a small number of initial IDUs– chosen by the survey team– recruit and bring in other IDUs that they knew for a monetary incentive. This approach put the burden of identifying and recruiting IDUs on those with the best current information on where to find other IDUs– active users– rather than project outreach workers or others who lack membership in active drug scenes.

The success of this approach, and the extent to which IDUs would participate and cooperate, was unknown. For the most part, IDUs were willing to participate; in fact,

several declined to take the monetary incentive offered because as one IDU stated, *"This project is trying to help us!"* The interviewers had few non-responses to questions, and nearly all IDUs provided blood for syphilis and HIV testing. This enthusiastic response was a surprise to the research team. Moreover, it suggests that the IDU population can play a much more active role in providing prevention services for themselves and their peers. The second positive outcome was that NGOs and government research institutions forged new working relationships that will allow for stronger, more synergistic prevention programming in the future.

There are several findings in the BBPS that indicate behaviors that put IDUs and their partners at risk for HIV infection. Specifically related to injecting drug use, there is a significant amount of sharing of injecting equipment and other paraphernalia reported by the respondents. Two out of every 5 IDUs under 25 years of age had previously used a needle or syringe at their last injection. Moreover, the lowest percentage of IDUs that attempted to "clean" the needle or syringe was for the youngest age group. This is in contrast to the older IDUs who were more cautions about sharing and using previously used needles and syringes. When asked if they ever had used a previously used needle/syringe, 67% of the respondents indicated that they had. This is consistent with, but higher than, the 55% of the respondents in the survey conducted by the AIDS Center in 1997; however, this may be due to the larger number of younger respondents in this survey. When asked if they had used shared drug paraphernalia (i.e., bottles, spoon, boiling pan, glass container, cotton filter or water), 79% responded yes. Another important finding is that 20.2% (or 61) of all IDUs share needles, syringes or injecting equipment often or always, and also have a regular partner or spouse with whom they never use a condom. About one third of the IDUs reported disposing of needles unsafely, either by throwing them on the ground or throwing them in the trash uncapped.

Positive Hepatitis B and Hepatitis C serologic markers in IDUs corroborate this reported behavior of sharing drug-injecting equipment. In the 1999 study of the AIDS center, 52% of IDUs were Hepatitis B positive and 58% were Hepatitis C positive. This is in contrast to the blood donor groups where the prevalence of Hepatitis B and Hepatitis C was about 7%.

Of note, about 10% of IDUs reported sharing a needle/syringe in the last week with a sexual partner, about 5% with their usual sexual partner and about 5% with a sexual partner they did not know. This suggests that injecting drug use among females is more common than the proportion of female IDUs recruited in this survey. Women drug users in many locales are often socially isolated. It is not uncommon for female IDUs to have heightened levels of stigma and associated shame and guilt. Therefore, they are less forthcoming about their use.

In addition to drug taking risk behavior, there are several findings in the BBPS that indicate risk behavior for sexual transmission of HIV. The age for first sexual contact is increasingly beginning at a younger age among IDUs, and there is low reported condom use with regular partners. Moreover, it is the youngest age group of IDUs that have more casual and sex-worker partners. The youngest age group reported having sex with, on average, 5.3 sex workers in the previous 12 months. Of these, only two-thirds reported always using a condom.

This data suggests several areas where risk behaviors could be modified. While this study is quantitative and allows for documentation of impact of interventions on behavior change, it must be supplemented with qualitative information to better understand motivations for behavior change interventions to be successful.

Strategies for changing behavioral practices in the IDU population will need to focus on: a) reducing needle, syringe, drug paraphernalia-sharing practices; b) reducing unprotected sex; and c) safe needle disposal. In addition to these interventions directed at the individual, interventions addressing their social structures/networks, drug-taking norms, and the risk environment that makes drug use unsafe is essential.

Individual behavior change interventions

Nearly all IDUs reported that access to needles and syringes was not a problem. As such, a free or low-cost needle exchange program does not appear to be a priority. Rather, efforts need to focus on behavior change, such as reducing the practice of sharing needles, syringes, and/or injecting equipment. Most of the drug use appears to be drug misuse rather than drug addiction. As such, much of the drug use behavior is planned; likewise, having an available clean needle could also be planned. However, because they are intermittent users, IDUs are often less skilled and less prepared, thereby increasing their risk. In addition, until IDUs begin using a new needle or syringe for each injection, a greater emphasis must be put on informing IDUs how to better clean previously used needles and syringes prior to injecting and not sharing drug preparation equipment.

Virtually all (95%) IDUs knew that injecting with a used needle or syringe transmitted the HIV virus. Thus, for those IDUs that share needle/syringe, this practice does not occur from ignorance but rather represents a ritual based on trust since most sharing occurs with someone they know (an acquaintance or another drug addict). Moreover, a large percentage of IDUs share injecting equipment; however, the degree to which IDUs know this is another high-risk behavior is unknown. While not captured in this data, interviewers reported that IDUs were surprised that the sharing of drug paraphernalia was also risky. Thus, greater effort needs to be made at informing IDUs that sharing injection equipment can transmit HIV.

Another high-risk behavior that will need to be addressed is unprotected sex. While there is a relatively high reported condom use rate with FSWs, this decreases dramatically for regular partners (about 25%).

Again, a large majority (87.7%) of IDUs knew that the correct use of a condom could protect one from the transmission of the HIV virus. However, almost one-fifth of IDUs that had sex with a sex worker did not use a condom at their last encounter; slightly more than one-half did not use a condom at their last sexual encounter with their casual partner. This indicates that there is a core group of IDUs that do not use a condom for this high-risk sex.

Service provision: Detoxification/drug treatment and voluntary counseling and testing interventions

Almost three-quarters of IDUs have never had treatment. A significantly higher percentage of younger IDUs has never received treatment. This may indicate that younger IDUs do not consider their drug use as an addiction needing treatment. Outreach efforts should convince younger IDUs to receive treatment before their drug use becomes an addiction, and barriers to seeking treatment should be minimized.

For those IDUs that attempt detoxification, almost two-fifths do so by using "extreme need." When they do use "extreme need," most do so without help. It needs to be further investigated whether this form of self-detoxification represents lack of access to detoxification services, or whether there is a stigma or other social obstacles to participating in detoxification services.

It has generally been shown that knowing if one's HIV serostatus is positive can have a profound impact on behavior.[25] Based on the results of this study, many of the IDUs were willing to provide a blood specimen for testing. Voluntary HIV counseling and testing services should be promoted more widely.

Social network interventions

IDUs reported that parents and spouses are the most important influences on them to quit their drug abuse. For single IDUs parents are most important, whereas spouses are most important for married IDUs. For married IDUs, only a small proportion stated that their children had a major influence on them stopping their addiction. After parents and spouses, friends, neighbors and siblings were important influences on IDUs to quit their addiction. Only 15.6% of IDUs reported that nobody was influential in getting them to quit their drug use. Prevention strategies will also need to address these broader social networks.

In addition, as discussed above the enthusiastic response of the respondents to the survey suggests that the IDU population can play a much more active role in providing prevention services and changing drug sharing and drug taking norms for themselves and their peers.

Reducing the risk environment interventions

Multiple strategies are necessary to prevent or halt HIV epidemics among drug-using populations. These include individual behavior change interventions as outlined above, as well as interventions that address broader structural issues that create risks. One important intervention is to reduce obstacles to prevention and treatment services– they must be affordable, convenient, user-friendly and confidential. In addition, government policies and legislation influence HIV risk patterns in IDU communities. Thus, a careful legal analysis of different policies, legislation and regulations is needed to determine how they potentially affect behavior and vulnerability. This includes the following:

[25] "Sexual Behavior Change of HIV." King, Rachael. 1999. UNAIDS. UNAIDS Best Practice Collection.

- Compulsory drug and STI testing and treatment;
- Required reporting and registrations of illicit drug users;
- Exclusion of protection for illegal drug users; and
- Prison policies that inhibit the provision of supplies that can help prevent the spread of HIV.

In addition, IDUs frequently are harassed by police and fear arrest. This makes it more difficult for prevention service workers to reach this population and difficult for IDUs to voluntarily access prevention services. Drug users are afraid to get clean needles, for example, because of fear of arrest. It has been demonstrated in several places that it is possible to negotiate with local authorities for a pragmatic and flexible application of laws and regulations that would lower barriers to assistance and enable IDUs to change their behaviors to reduce risk.

Recommendations

1. Multiple behaviors in the IDU population are putting them at risk for HIV infection, including shared drug solutions, needles, syringes and other injecting equipment; contamination of drug solution during distribution; and unprotected sex. Interventions must address all potential risk behaviors. The relative emphasis of these messages may be different for sub-populations of IDUs – the occasional drug user versus the more regular drug users, who may be addicted. Interventions emphasizing discontinuation of injecting drug use might be a feasible message for the occasional users. Addressing the norms and rituals around injecting drugs will be important.

2. Behavior change communication interventions should be targeted at drug users and their families. Involving IDUs in the development of relevant messages and the distribution of these messages within their networks will increase the effectiveness of the message. While television was cited as the main source of HIV/AIDS information by IDUs, television information campaigns on IDUs for the general public can increase stigmatization. Specific, explicit HIV prevention messages and materials for IDUs are best done at the interpersonal level through drug-user social networks.

3. Hepatitis B and C are prevalent infections among IDUs. Educational material should also address issues related to Hepatitis B and C. In addition, there should be complementary integration of the HIV program and the Hepatitis B and C program with, at a minimum, some cross training of personnel in transmission issues, counseling issues and referral network lists. Hepatitis B and C are well known by the IDU community, and linking HIV to the same risks of transmission will enhance prevention efforts.

4. Voluntary HIV counseling and testing (VCT) should be enhanced, with adequate pre- and post-test counseling. Ideally someone who also understands issues facing IDUs should perform this counseling. Testing can assist in risk reduction counseling. Current HIV testing procedures in Georgia require a waiting time between the drawing of blood and the return of the test results. Pilot testing of rapid testing procedures for validity and client acceptability might increase the number of individuals getting HIV testing. VCT services should be made available though sites

that provide other HIV prevention services to IDUs.

5. Based on reports of needle sharing with female injecting partners, there appears to be more female injecting drugs than were originally thought. Female IDUs appear to be a hidden and isolated population in Georgia, and specific interventions will need to be developed to access them.

6. In order to create a more supportive environment for risk reduction, policy and legislative concerns should be addressed. In the short-term, public health officials and NGOs should negotiate with local authorities for a more pragmatic and flexible application of law and regulations. This would include, for example, a dramatic decrease in the risk of arrest for IDUs if they are found carrying a needle, or to provide "free passage" for outreach workers and peer educators. In parallel, there should be a review of existing laws and regulations that impede effective implementation of HIV prevention strategies.

7. While not addressed in this survey, it is known from data from Russia[26] and Thailand[27] that incarceration can fuel the HIV epidemic in IDUs. As such, HIV prevention activities in prison settings need to be considered part of a comprehensive program, and regulatory issues in prisons should be explicitly addressed as in item # 6 above.

8. Addressing sexual risk is also important. Reported condom use with FSWs was high but for regular partners was low. Condom use with FSWs must be reinforced, and condom promotion with regular partners needs to be emphasized. IDU behaviors can play a critical role in the spread of HIV into the broader population through sexual transmission to sexual partners and through mother-to-child transmission (MTCT).[28] Providing counseling to sex partners of IDUs on their potential risk and on the importance of condom use would also be important. This could be accomplished in part through family planning and reproductive heath programs to help them develop skills in condom negotiation when they know or suspect that their sexual partners are injecting drugs. Reinforcing this message to IDUs will be important.

9. The majority of drug use/experimentation starts at adolescence during secondary and tertiary education. Those from educational and public health institutions working with youth should address drug use prevention, as well as the specific risks associated with injecting drugs, as part of an overall effort to promote STI/HIV/AIDS awareness. Interventions and services should be made available for those youth already using drugs.

10. Interventions for IDU populations must be extended beyond Tbilisi. Based on information from the Research Institute on Addiction and data from the AIDS Center, injecting drugs is more widespread than previously thought. Moreover, IDUs

[26] "Prison-based syringe exchange programmes: a review of international research and development." Dolan K, Rutter S, Wodak AD. 2003. Addiction, February: 98(2): 153-158.

[27] "Incarceration and risk for HIV infection among injecting drug users in Bangkok," Choopanya K. et al. 2002. Journal of Acquired Immune Deficiency Syndrome, January 1, 29(1): 86-94.

[28] For example, in Manipur, a study conducted in 2000 found that 45% of the regular sexual partners of HIV-positive IDUs acquired the virus over a six-year period; in 1996-2001 most of the HIV-positive infants in Ukraine and the Russian Federation were born to mothers who were IDUs or were sex partners of IDUs.

are the most frequent group represented in the HIV statistics.

11. A non-coercive, anonymous, and ethical systematic surveillance of both behavioral and selected biologic markers of IDU populations (and other high risk groups) should be conducted throughout Georgia and repeated on a regular basis to monitor whether interventions are working.

Appendix of Data Tables

Table 1: Area Coverage of the Tbilisi, Georgia Behavioral Surveillance Survey.

Location	Tbilisi
Date of interviews	11 October to 11 November 2002
Location of interview (n)	
At organizations office	95.0% (287)
At home	5.0% (15)
Recruitment (n)	
RDS method	91.6% (277)
Hospitalized	5.4% (16)
Needle exchange program	0.7% (2)
Other	2.3% (7)
Refusal rate	
Total recruited or volunteered	322
Total agreed	302
Total completed	302
Total agreed to blood sample	284

Table 2: Demographic Characteristics of IDU Study Participants in Tbilisi.

Characteristics (n)	Males	Females
Gender	99.3% (300)	0.7% (2)
Age		
Mean Age (years)	28.9 (300)	27.0 (2)
Median Age (years)	27.0 (300)	27.0 (2)
Age Groups		
<20yrs	6.3% (19)	
20 – 29 yrs	52.3% (157)	50.0% (1)
30 – 39 yrs	29.3% (88)	50.0% (1)
40 – 49 yrs	11.0% (33)	
50+ yrs	1.0% (3)	
Ethnicity		
Georgian	93.0% (279)	100.0% (2)
Armenian	4.3% (13)	--
Russian	1.0% (3)	--
Ezid	1.0% (3)	--
Azeri	0.3% (1)	--
Kurd	0.3% (1)	--
Level of Education		
None	0.0%	--
Primary	0.7% (2)	--
Secondary/vocational	29.3% (88)	--
Incomplete higher	17.7% (53)	--
Higher	52.3% (157)	100.0% (2)
Internally Displaced Person		
Yes	2.0% (6)	--
No	94.7% (284)	100.0% (2)
No response	3.3% (10)	--
Present living place		
Tbilisi	97.3% (292)	100.0% (2)
(yrs lived in Tbilisi)	mean=12.3	mean=1.0
	median=10.5	--
Another town/city in Georgia	2.4% (7)	--
Russia (Moscow)	0.3% (1)	--
Have you left Tbilisi for more than one month?		
Yes	48.0% (144)	50.0% (1)
No	51.0% (153)	50.0% (1)
No response	1.0% (3)	--

Table 3: Living Arrangements by Marital Status of IDUs.

	Males				Females	
	Never married	Married	Divorced/ separated	Widower	Married	Divorced/ separated
Percentage (n)	51.3% (154)	39.7% (119)	8.7% (26)	0.3% (1)	50.0% (1)	50.0% (1)
Mean age (yrs)	24.2	33.8	34.0	32.0	24.0	30.0
Age at marriage (yrs)						
Mean	-	23.3	21.5	22.0	23.0	15.0
Median	-	22.0	20.5	22.0	23.0	15.0
With Whom Do You Live Now?						
- With spouse and parents	--	98.3% (117)	7.7% (2)	--	100.0% (1)	--
- Married, with another female	--	--	--	--	--	--
- Married not living with spouse/partner	--	0.8% (1)	--	--	--	--
- Alone	14.9% (23)	0.8% (1)	34.6% (9)	100.0% (1)	--	100.0% (1)
- Living with parents	81.8% (126)	--	42.3% (11)	--	--	--
- Other	1.2% (2)	--	15.3% (4)	--	--	--
- Refused to answer	1.9% (3)	--	--	--	--	--

Table 4: Alcohol and Drug Use by IDUs.

Alcohol & Drug Use (n)	Gender		Age Groups			
	Males	**Females**	**15-24**	**25-30**	**31-39**	**40+**
	(n=300)	(n=2)	(n=105)	(n=92)	(n=69)	(n=36)
Alcohol consumption in past 4 wks						
Every day	7.0% (21)	--	6.7% (7)	8.7% (8)	2.9% (2)	11.1% (4)
More than once a week	41.7% (125)	50.0% (1)	44.8% (47)	38.0% (35)	43.5% (30)	38.9% (14)
Once in a week	1.3% (4)	--	1.9% (2)	0.0% (0)	1.4% (1)	2.8% (1)
Less than once a week	27.0% (81)	--	29.5% (31)	26.1% (24)	30.4% (21)	13.9% (5)
Once in a month	3.3% (10)	--	3.8% (4)	2.2% (2)	5.8% (4)	0.0% (0)
Never	19.3% (58)	50.0% (1)	12.4% (13)	25.0% (23)	15.9% (11)	33.3% (12)
Refused to answer	0.3% (1)	--	1.0% (1)	--	--	--
Mean yrs using drugs	10.4	7.0	4.9	9.6	13.5	22.1
Median yrs using drugs	9.0	--	5.0	10.0	14.0	24.0
Age at first drug use						
<15 yrs	15.0% (45)	--	23.8% (25)	16.3% (15)	5.8% (4)	2.8% (1)
15 – 19 yrs	52.3% (157)	50.0% (1)	62.9% (66)	52.2% (48)	40.6% (28)	44.4% (16)
20 – 24 yrs	23.7% (71)	50.0% (1)	13.3% (14)	29.3% (27)	33.3% (23)	22.2% (8)
25+ yrs	9.0% (27)	--	--	2.2% (2)	20.3% (14)	30.6% (11)
Mean yrs injecting drugs	8.5	6.0	2.6	7.8	12.0	20.4
Median yrs injecting drugs	6.0	--	2.0	8.0	13.0	22.0
Age at first injecting (%)						
<15 yrs	1.7% (5)	--	1.9% (2)	2.2% (2)	1.4% (1)	--
15 – 19 yrs	45.3% (136)	50.0% (1)	57.1% (60)	44.6% (41)	34.8% (24)	33.3% (12)
20 – 24 yrs	41.7% (125)	50.0% (1)	41.0% (43)	48.9% (45)	37.7% (26)	33.3% (12)
25+ yrs	11.3% (34)	--	--	4.3% (4)	26.1%(18)	33.3% (12)
% injected in the last week						
Yes	67.7% (202)	50.0% (1)	57.1% (60)	67.4% (62)	75.4% (52)	83.3% (30)
No	32.3% (97)	50.0% (1)	42.9% (45)	32.6% (30)	24.6% (17)	16.7% (6)
If yes, mean # of drugs injected:	(202)	(1)	(60)	(62)	(52)	(30)
1	69.0% (140)	100.0% (1)	81.7% (49)	66.1% (41)	59.6% (31)	66.7% (20)
2	23.2% (47)	--	13.3% (8)	25.8% (16)	34.6% (18)	16.7% (5)
3	6.9% (14)	--	3.3% (2)	8.1% (5)	3.8% (2)	16.7% (5)
4	0.0% (0)	--	0.0% (0)	0.0% (0)	0.0% (0)	--
5	1.0% (1)	--	1.7% (1)	0.0% (0)	1.9% (1)	--
Mean	1.4	1.0	1.3	1.4	1.5	1.5
Injected in other locations in previous 12 months	68.7% (206/300)	50.0% (1/1)	63.8% (67/105)	67.4% (62/92)	47.8% (33/69)	50.0% (18/36)
Mean # cities (if yes)	2.2 (206)	1.0 (1)	1.8 (67)	2.3 (62)	2.5 (33)	2.3 (18)
Outside Georgia	16.7% (50/300)	50.0% (1/1)	13.3% (14/105)	25.0% (23/92)	13.0% (9/69)	13.9% (5/36)
Mean # countries (if yes)	1.8 (50)	1.0 (1)	1.1 (14)	2.3 (23)	2.0 (90)	1.4 (5)
Share needles/syringes in other locations	33.7% (70/208)	50.0% (1/1)	25.9% (21/81)	40.3% (27/67)	35.0% (14/40)	38.1% (8/21)
Allow someone else to use your needles/syringes in other locations	30.8% (64/208)	50.0% (1/1)	23.5% (19/81)	38.8% (26/67)	30.0% (12/40)	33.3% (7/21)
Significant differences						
Age at first drug use by age groups:	χ^2= 69.11 (9df), p<.000.					
Age at first injecting by age groups:	χ^2= 53.69 (9df), p<.000.					
Injected last week by age groups:	χ^2= 11.29 (3df), p<.01.					

Table 5: Drugs Used In The Last Week by IDUs.

	Total	Gender		Age Groups			
		Males	Females	15-24	25-30	31-39	40+
		(n=300)	(n=2)	(n=105)	(n=92)	(n=69)	(n=36)
Used drugs last week	90.1% (272/302)	90.3% (271/300)	50.0% (1/2)	88.6% (93/105)	91.3% (84/92)	92.8% (64/69)	86.1% (31/36)
Drug used in the last week							
Heroin	62.3% (177/284)	62.3% (177/282)	50.0% (1/1)	52.5% (52/99)	61.6% (53/86)	80.3% (53/66)	57.6% (19/33)
Marijuana	55.1% (158/287)	55.1% (158/285)	0.0% (0/2)	74.5% (76/102)	58.1% (50/86)	40.9% (27/66)	15.2% (5/33)
Opium	16.9% (47/278)	16.9% (47/276)	0.0% (0/2)	12.4% (12/97)	14.5% (12/83)	20.0% (13/65)	30.3% (10/33)
Tranquilizers	9.4% (26/278)	9.4% (26/276)	0.0% (0/2)	6.2% (6/97)	6.0% (5/83)	13.8% (9/65)	18.2% (6/33)
Codeine	7.2% (20/279)	7.2% (20/277)	0.0% (0/2)	5.2% (5/97)	8.3% (7/84)	7.7% (5/65)	9.1% (3/33)
Methadone	3.6% (2/279)	3.6% (2/277)	0.0% (0/2)	0.0% (0/97)	6.0% (5/84)	6.2% (4/65)	3.0% (1/33)
Tramadol	3.6% (10/278)	3.6% (10/276)	0.0% (0/2)	5.2% (5/97)	2.4% (2/83)	1.5% (1/65)	6.1% (2/33)
Ephedrine	3.2% (9/280)	3.2% (9/278)	0.0% (0/2)	3.1% (3/98)	4.8% (4/84)	1.5% (1/65)	3.0% (1/33)
Morphine	2.9% (8/280)	2.9% (8/278)	0.0% (0/2)	2.1% (2/97)	3.5% (3/85)	1.5% (1/65)	6.1% (2/33)
Barbiturates	1.4% (4/278)	1.4% (4/276)	0.0% (0/2)	1.0% (1/97)	2.4% (2/83)	1.5% (1/65)	0.0% (0/33)
Cocaine	1.4% (4/279)	1.4% (4/277)	0.0% (0/2)	0.0% (0/97)	4.8% (4/84)	0.0% (0/65)	0.0% (0/33)
Caffeine	1.4% (4/278)	1.4% (4/276)	0.0% (0/2)	0.0% (0/97)	1.2% (1/83)	0.0% (0/65)	9.1% (3/33)
Poppy	1.4% (4/278)	1.4% (4/276)	0.0% (0/2)	2.1% (2/97)	1.2% (1/83)	1.5% (1/65)	0.0% (0/33)
Valium	1.4% (4/278)	1.4% (4/276)	0.0% (0/2)	1.0% (1/97)	2.4% (2/83)	0.0% (0/65)	3.0% (1/33)
Ecstasy	1.1% (3/278)	1.1% (3/276)	0.0% (0/2)	1.0% (1/97)	1.2% (1/83)	1.5% (1/65)	0.0% (0/33)
Cyclodol	0.7% (2/279)	0.7% (2/277)	0.0% (0/2)	1.0% (1/98)	0.0% (0/83)	1.5% (1/65)	0.0% (0/33)
Inhalants	0.4% (1/278)	0.4% (1/276)	0.0% (0/2)	0.0% (0/97)	0.0% (0/83)	0.0% (0/65)	3.0% (1/33)
Other opiates	0.4% (1/278)	0.4% (1/276)	50.0% (1/1)	0.0% (0/97)	1.2% (1/83)	0.0% (0/65)	0.0% (0/33)
Amphetamine	0.4% (1/278)	0.4% (1/276)	0.0% (0/2)	0.0% (0/97)	1.2% (1/83)	0.0% (0/65)	0.0% (0/33)
LSD	0.0% (0/278	0.0% (0/278)	0.0% (0/2)	0.0% (0/97)	0.0% (0/83)	0.0% (0/65)	0.0% (0/33)
Mean # of drugs used last week	2.0	2.0	2.0	1.9	2.0	2.1	2.1

Table 6: Drugs Injected In The Last Week by IDUs.

	Total	Gender		Age Groups			
		Males	Females	15-24	25-30	31-39	40+
		(n=300)	(n=2)	(n=105)	(n=92)	(n=69)	(n=36)
Injected drugs last week	67.5% (204/302)	67.7% (203/300)	50.0% (1/2)	57.1% (60/105)	67.4% (62/92)	75.4% (52/69)	83.3% (30/36)
Injected in the last week							
Heroin	64.9% (170/262)	65.0% (169/260)	50.0% (1/2)	58.4% (52/89)	61.0% (50/82)	81.7% (49/60)	61.3% (19/31)
Opium	19.0% (46/242)	19.2% (46/240)	0.0% (0/2)	15.4% (12/78)	14.7% (11/75)	22.4% (13/58)	32.3% (10/31)
Methadone	3.8% (9/239)	3.8% (9/237)	0.0% (0/2)	0.0% (0/77)	5.3% (4/76)	7.0% (4/57)	3.4% (1/29)
Ephedrine	2.9% (7/239)	3.0% (7/237)	0.0% (0/2)	3.8% (3/78)	2.7% (2/75)	1.8% (1/57)	3.4% (1/29)
Morphine	2.9% (7/239)	3.0% (7/237)	0.0% (0/2)	2.6% (2/77)	2.6% (2/76)	1.8% (1/57)	6.9% (2/29)
Poppy	2.1% (5/238)	2.1% (5/236)	0.0% (0/2)	2.6% (2/77)	1.3% (1/75)	1.8% (1/57)	3.4% (1/29)
Caffeine	1.7% (4/238)	1.7% (4/236)	0.0% (0/2)	1.3% (1/77)	1.3% (1/75)	0.0% (0/57)	6.9% (2/29)
Cocaine	1.3% (3/239)	1.3% (3/237)	0.0% (0/2)	0.0% (0/77)	3.9% (3/76)	0.0% (0/57)	0.0% (0/29)
Tranquilizers	1.2% (3/255)	1.2% (3/253)	0.0% (0/2)	1.2% (1/84)	0.0% (0/79)	1.6% (1/61)	3.2% (1/31)
Codeine	1.2% (3/255)	1.2% (3/253)	0.0% (0/2)	0.0% (0/84)	2.5% (2/79)	1.6% (1/61)	0.0% (0/31)
Marijuana	0.8% (2/238)	0.8% (2/236)	0.0% (0/2)	0.0% (0/77)	1.3% (1/75)	0.0% (0/57)	3.4% (1/29)
Valium	0.4% (1/238)	0.4% (1/236)	0.0% (0/2)	0.0% (0/77)	1.3% (1/75)	0.0% (0/57)	0.0% (0/29)
Tramadol	0.0% (0/238)	0.0% (0/236)	0.0% (0/2)	0.0% (0/77)	0.0% (0/75)	0.0% (0/57)	0.0% (0/29)
Barbiturates	0.0% (0/255)	0.0% (0/253)	0.0% (0/2)	0.0% (0/84)	0.0% (0/79)	0.0% (0/61)	0.0% (0/31)
Ecstasy	0.0% (0/238)	0.0% (0/236)	0.0% (0/2)	0.0% (0/77)	0.0% (0/75)	0.0% (0/57)	0.0% (0/29)
Cyclodol	0.0% (0/238)	0.0% (0/236)	0.0% (0/2)	0.0% (0/77)	0.0% (0/75)	0.0% (0/57)	0.0% (0/29)
Inhalants	0.0% (0/255)	0.0% (0/253)	0.0% (0/2)	0.0% (0/84)	0.0% (0/79)	0.0% (0/61)	0.0% (0/31)
Amphetamine	0.0% (0/238)	0.0% (0/236)	0.0% (0/2)	0.0% (0/77)	0.0% (0/75)	0.0% (0/57)	0.0% (0/29)
LSD	0.0% (0/238)	0.0% (0/236)	0.0% (0/2)	0.0% (0/77)	0.0% (0/75)	0.0% (0/57)	0.0% (0/29)
Mean # of drugs injected last week	1.4	1.4	1.0	1.3	1.4	1.5	1.5

Table 7: Switched Drugs In The Last Month Among IDUs.

	Total	Gender		Age Groups			
		Males	Females	15-24	25-30	31-39	40+
		(n=300)	(n=2)	(n=105)	(n=92)	(n=69)	(n=36)
Switched drugs in last month							
Yes	39.9% (115/288)	40.2% (115/286)	0.0% (0/2)	30.6% (30/98)	51.1% (45/88)	42.4% (28/66)	33.3% (12/36)
If yes, *from* what drug							
Heroin	65.2% (75/115)	65.2% (75/115)	--	75.8% (25/33)	64.4% (29/45)	57.7% (15/26)	54.5% (6/24)
Opium	12.2% (14/115)	12.2% (14/115)	--	15.2% (5/33)	11.1% (5/45)	7.7% (2/26)	18.2% (2/24)
Codeine	3.5% (4/115)	3.5% (4/115)	--	3.0% (1/33)	4.4% (2/45)	0.0% (0/26)	9.1% (1/24)
Buprenorphine (*subutex*)	3.5% (4/115)	3.5% (4/115)	--	0.0% (0/33)	4.4% (2/45)	7.7% (2/26)	0.0% (0/24)
Methadone	3.5% (4/115)	3.5% (4/115)	--	0.0% (0/33)	4.4% (2/45)	7.7% (2/26)	0.0% (0/24)
Marijuana	3.5% (4/115)	3.5% (4/115)	--	3.0% (1/33)	2.2% (1/45)	7.7% (2/26)	0.0% (0/24)
Tramadol	2.6% (3/115)	2.6% (3/115)	--	3.0% (1/33)	2.2% (1/45)	0.0% (0/26)	0.0% (0/24)
Morphine	2.6% (3/115)	2.6% (3/115)	--	0.0% (0/33)	4.4% (2/45)	0.0% (0/26)	18.2% (2/24)
Ephedrine	1.7% (2/115)	1.7% (2/115)	--	0.0% (0/33)	2.2% (1/45)	3.8% (1/26)	0.0% (0/24)
Cocaine	1.7% (2/115)	1.7% (2/115)	--	0.0% (0/33)	2.2% (1/45)	3.8% (1/26)	0.0% (0/24)
If yes, *to* what drug							
Opium	29.1% (32/110)	29.1% (32/110)	--	24.1% (7/29)	29.6% (13/44)	30.8% (8/26)	36.4% (4/11)
Heroin	20.9% (23/110)	20.9% (23/110)	--	17.2% (5/29)	22.7% (10/44)	26.9% (7/26)	9.1% (1/11)
Buprenorphine (*subutex*)	13.6% (15/110)	13.6% (15/110)	--	13.8% (4/29)	15.9% (7/44)	7.7% (2/26)	18.2% (2/11)
Marijuana	12.7% (14/110)	12.7% (14/110)	--	27.6% (8/29)	11.4% (5/44)	3.9% (1/26)	0.0% (0/11)
Codeine	7.3% (8/110)	7.3% (8/110)	--	0.0% (0/29)	4.5% (2/44)	15.4% (4/26)	18.2% (2/11)
Methadone	4.5% (5/110)	4.5% (5/110)	--	0.0% (0/29)	9.3% (4/44)	3.8% (1/26)	0.0% (0/11)
Whatever is available	3.6% (4/110)	3.6% (4/110)	--	6.9% (2/29)	0.0% (0/44)	7.7% (2/26)	0.0% (0/11)
Morphine	1.8% (2/110)	1.8% (2/110)	--	0.0% (0/29)	2.3% (1/44)	0.0% (0/26)	9.1% (1/11)
Pervitine (homemade)	1.8% (2/110)	1.8% (2/110)	--	0.0% (0/29)	2.3% (1/44)	3.8% (1/26)	0.0% (0/11)
Ephedrine	1.8% (2/110)	1.8% (2/110)	--	0.0% (0/29)	2.3% (1/44)	0.0% (0/26)	9.1% (1/11)
Tramadol	1.8% (2/110)	1.8% (2/110)	--	6.9% (2/29)	0.0% (0/44)	0.0% (0/26)	0.0% (0/11)
Diazepam	0.9% (1/110)	0.9% (1/110)	--	3.4% (1/29)	0.0% (0/44)	0.0% (0/26)	0.0% (0/11)

Table 8: HIV/AIDS Knowledge and Testing Among IDUs.

	Total	Gender		Age Groups			
		M	F	15-24	25-30	31-39	40+
N	302	300	2	105	92	69	36
Aware of HIV	98.7% (301/302)	98.3% (295/299)	100.0% (2/2)	99.0% (104/105)	98.9% (91/92))	98.6% (68/69)	97.1% (34/35)
Know Person with HIV/AIDS	69.9%	70.0%	50.0%	65.7%	77.2%	72.5%	61.8%
Yes	(211/300)	(210/298)	(1/2)	(69/105)	(71/92)	(50/69)	(21/34)
Close friend or relative	17.6% (37/210)	17.7% (37/209)	0.0% (0/1)	15.8% (11/69)	16.9% (12/71)	22.4% (11/49)	14.3% (3/21)
Key HIV/AIDS Knowledge							
Correct condom use	87.7% (265/301)	88.0% (264/299)	50.0% (1/2)	92.8% (64/69)	90.1% (64/71)	92.0% (46/50)	81.0% (17/21)
One faithful partner	78.7% (237/301)	78.9% (236/299)	50.0% (1/2)	80.0% (84/105)	78.3% (72/92)	84.1% (58/69)	65.7% (23/35)
Abstinence	53.2% (160/301)	53.2% (159/299)	50.0% (1/2)	61.0% (64/105)	55.4% (51/92)	39.1% (27/69)	51.4% (18/35)
Mosquito bites (no)	37.9% (114/301)	38.1% (114/299)	50.0% (1/2)	39.0% (41/105)	41.3% (38/92)	30.4% (21/69)	40.0% (14/35)
Meal-sharing (no)	53.3% (160/300)	53.7% (160/298)	0.0% (0/2)	18.1% (63/105)	49.5% (45/91)	43.5% (30/69)	62.9% (22/35)
Switching to non-injecting drugs	74.7% (224/300)	74.8% (223/298)	50.0% (1/2)	69.2% (72/104)	76.1% (70/92)	78.3% (54/69)	80.0% (28/35)
All Six Items Correct	14.9% (45/302)	15.0% (45/300)	0.0% (0/2)	18.1% (19/105)	16.3% (15/92)	7.2% (5/69)	16.7% (6/36)
More HIV/AIDS Knowledge							
Injecting w/ used needle	95.0% (286/301)	95.3% (285/299)	50.0% (1/2)	99.0% (104/105)	93.5% (86/92)	92.8% (64/69)	91.4% (32/35)
Pregnant woman to fetus	72.1% (217/301)	71.9% (215/299)	100.0% (2/2)	64.8% (68/105)	65.2% (60/92)	84.1% (58/69)	88.6% (31/35)
Breastfeeding	44.0% (132/300)	43.6% (130/298)	100.0% (2/2)	34.3% (36/105)	41.8% (38/91)	55.1% (38/69)	57.1% (20/35)
HIV Testing in Community	80.6% (241/299)	80.8% (240/297)	50.0% (1/2)	78.1% (82/105)	78.3% (72/92)	85.3% (58/68)	85.3% (29/34)
Had Voluntary HIV Test and Received Results	20.1% (60/299)	20.2% (60/297)	0.0% (0/2)	4.8% (5/105)	30.4% (28/92)	26.5% (18/68)	26.5% (9/34)
Significant differences							
Had voluntary HIV test and received results by age groups: χ^2= 24.11 (3df), p<0.000.							

Table 9: Sexual Behavior and Reported STIs Among IDUs.

	Total	Gender		Age Groups			
		M	F	15-24	25-30	31-39	40+
N	302	300	2	105	92	69	36
Ever Had Sex (%)	100.0%	100.0%	100.0%	100%	100%	100%	100%
Missing (#)	7	7	0	(99/99)	(91/91)	(69/69)	(36/36)
Mean Age at 1st Sex (yrs)	15.0	14.9	16.0	14.6	14.8	15.2	15.8
Median Age at 1st Sex (yrs)	15.0	15.0	16.0	15.0	15.0	15.0	15.5
	(295)	(293)	(2)	(99)	(91)	(69)	(36)
Sexually Active, Last 12 Months	99.0%	99.0%	100.0%	100%	98.9%	98.5%	97.2%
	(293/296)	(291/294	(2/2)	(104/104)	(91/92)	(67/68)	(35/36)
Regular sex							
Had Regular Sex Partner, 12 Mos (%)	82.4%	82.3%	100.0%	70.6%	82.2%	92.6%	97.1%
	(243/295)	(241/293)	(2/2)	(72/102)	(74/90)	(63/68)	(34/35)
Mean # regular sex partners, 12 Mos	1.6	1.6	1.0	1.9	1.6	1.5	1.4
Median # regular sex partners, 12 Mos	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	(243)	(241)	(2)	(72)	(74)	(63)	(34)
Sex workers (gave payment)							
Had sex worker partner, 12 Mos (%)	48.4%	48.7%	0.0%	64.6%	49.4%	35.9%	21.9%
	(134/277)	(134/275)	(0/2)	(62/96)	(42/85)	(23/64)	(7/32)
Mean # sex work partners, 12 Mos	4.6	4.6	--	4.5	4.5	5.3	3.6
Med. # sex work partners, 12 Mos	3.0	3.0	--	3.0	3.0	3.0	2.0
	(134)	(134)	--	(62)	(42)	(23)	(7)
Sex work (received payment)							
Had sex worker partner, 12 Mos (%)	2.0%	2.0%	--	2.9%	1.1%	2.9%	0.0%
	(6/300)	(6/300)	--	(3/105)	(1/92)	(2/69)	(0/24)
Mean # sex work partners, 12 Mos	3.8	3.8	--	2.0	4.0	6.5	--
Med. # sex work partners, 12 Mos	2.5	2.5	--	2.0	--	6.5	--
Non-regular sex							
Had non-regular sex partner, 12 Mos	60.8%	61.2%	0.0%	64.2%	68.6%	50.8%	50.0%
	(169/278)	(169/276)	(0/2)	(61/95)	(59/86)	(33/65)	(16/32)
Mean # non-reg. sex partners, 12 Mos	5.1	5.1	--	5.6	4.8	5.4	3.6
Med. # non-reg. sex partners, 12 Mos	3.0	3.0	--	3.0	3.0	3.0	3.0
	(169)	(169)	--	(61)	(59)	(33)	(16)
Urethral discharge	295	293	2	105	91	65	34
Yes	21.4%	20.8%	100.0%	16.2%	23.1%	24.6%	26.5%
Genital ulcer	294	292	2	105	91	65	33
Yes	6.5%	6.2%	50.0%	4.8%	8.8%	6.2%	6.1%

Significant differences:

Age at first sexual contact by age groups: F= 7.23 (3df), p<0.000.

Regular sex partner by age groups: χ^2 = 19.68 (3df), p<0.000.

Commercial sex partner by age groups: χ^2 = 22.15 (3df), p<0.000.

Table 10: Condom Use Among IDUs.

	Total	Gender		Age Groups			
		M	F	15-24	25-30	31-39	40+
N	302	300	2	105	92	69	36
Ever use male condom	93.0% (278/299)	93.3% (277/297)	50.0% (1/2)	93.3% (98/105)	93.4% (85/91)	94.1% (64/68)	88.6% (31/35)
Regular sex partner							
Condom use at last sex with regular sex partner	28.5% (70/246)	28.7% (70/244)	0.0% (0/2)	28.4% (21/74)	34.2% (26/76)	23.8% (15/63)	24.2% (8/33)
Consistent condom use with regular sex partner, 12 mos (n)	(244)	(242)	(2)	(74)	(75)	(63)	(32)
(1) Always	12.3%	12.4%	0.0%	12.2%	16.0%	14.3%	0.0%
(2) Almost always	13.5%	13.6%	0.0%	14.9%	13.3%	9.5%	18.8%
(3) Sometimes	25.8%	26.0%	0.0%	20.3%	28.0%	28.6%	28.1%
(4) Never	48.4%	47.9%	100.0%	52.7%	42.7%	47.6%	53.1%
Mean	3.1	3.1	4.0	3.1	3.0	3.1	3.3
Non-regular sex partner							
Condom use at last sex with non-regular sex partner	55.1% (86/156)	55.1% (86/156)	--	62.3% (38/61)	51.9% (27/52)	60.0% (18/30)	23.1% (3/13)
Consistent condom use with non-regular sex partner, 12 mos	(163)	(163)	--	(61)	(57)	(31)	(14)
(1) Always	33.7%	33.7%	--	41.0%	31.6%	32.2%	14.3%
(2) Almost always	24.5%	24.5%	--	26.2%	21.1%	29.0%	21.4%
(3) Sometimes	27.0%	27.0%	--	21.3%	33.3%	22.6%	35.7%
(4) Never	14.7%	14.7%	--	11.5%	14.0%	16.1%	28.6%
Mean	2.2	2.2	--	2.0	2.3	2.2	2.8
Commercial sex (gave payment)							
Condom use at last sex with commercial sex partner	83.5% (116/139)	83.5% (116/139)	--	89.1% (57/64)	76.7% (33/43)	80.0% (20/25)	85.7% (6/7)
Consistent condom use with commercial sex partner, 12 mos	(136)	(140)	--	(63)	(42)	(23)	(7)
(1) Always	60.3%	60.3%	--	66.7%	62.8%	47.8%	28.6%
(2) Almost always	19.9%	19.9%	--	19.0%	14.0%	26.1%	42.9%
(3) Sometimes	14.7%	14.7%	--	9.5%	18.6%	17.4%	28.6%
(4) Never	5.1%	5.1%	--	4.8%	4.7%	8.7%	0.0%
Mean	1.7	1.7	--	1.5	1.7	1.9	2.0

Table 11: Needle/Syringe Sharing Among IDUs.

	Total	Gender		Age Groups			
		M	F	15-24	25-30	31-39	40+
N	302	300	2	105	92	69	36
Ever used a previously used needle/syringe	(302)	(300)	(2)	(105)	(92)	(69)	(36)
Yes	67.2%	67.3%	50%	45.7%	83.7%	69.6%	83.3%
No	30.5%	30.3%	50%	50.5%	16.3%	27.5%	13.9%
Don't know	2.3%	2.3%	--	3.8%	--	2.9%	2.8%
At last injecting used previously used needle/syringe	(203)	(202)	(1)	(48)	(77)	(48)	(30)
Yes	22.7%	22.3%	100.0%	37.5%	24.7%	14.6%	6.7%
No	75.4%	75.7%	--	60.4%	75.3%	85.4%	90.0%
Don't know	2.0%	2.0%	--	2.1%	--	--	--
Shared needle/syringe last week?	(203)	(202)	(1)	(48)	(77)	(48)	(30)
Yes	31.5%	31.2%	100.0%	45.8%	27.3%	27.1%	27.0%
No	68.5%	68.8%	--	54.2%	72.7%	72.9%	73.3%
Mean # of people	2.5	2.5	1.0	2.3	2.7	2.8	2.2
	(58)	(57)	(1)	(18)	(18)	(12)	(10)
With whom did you share needle/syringe last week?	(57)	(56)	(1)	(18)	(18)	(11)	(10)
Acquaintance	71.9%	73.2%	0.0%	72.2%	83.3%	72.7%	50.0%
Person who is drug addict	59.6%	60.7%	0.0%	66.7%	50.0%	45.5%	80.0%
Stranger	12.3%	12.5%	0.0%	11.1%	16.7%	9.1%	10.0%
Drug trafficker	8.8%	8.9%	0.0%	5.6%	11.1%	9.1%	10.0%
Usual sex partner	5.3%	3.6%	100.0%	0.0%	5.6%	9.1%	10.0%
Sex partner not know before	5.3%	5.4%	0.0%	0.0%	5.6%	9.1%	10.0%
Used needle/syringe receptor/distributor	(173)	(172)	(1)	(44)	(56)	(47)	(26)
Neither	53.2%	53.5%	--	45.5%	53.6%	68.1%	38.5%
Receptor	10.4%	10.5%	--	15.9%	8.9%	6.4%	11.5%
Distributor	8.1%	8.1%	--	6.8%	5.4%	2.1%	26.9%
Both receptor & distributor	28.3%	27.9%	100.0%	31.8%	32.1%	23.4%	23.1%
How often did you try to clean the used needle/syringe last week?	(53)	(52)	(1)	(17)	(18)	(10)	(8)
Always	47.2%	46.2%	100.0%	35.3%	50.0%	50.0%	62.5%
Almost always	11.3%	11.5%	--	5.9%	11.1%	20.0%	12.5%
Sometimes	13.2%	13.5%	--	11.8%	11.1%	20.0%	12.5%
Once	13.2%	13.5%	--	17.6%	16.7%	0.0%	12.5%
Never	15.1%	15.4%	--	29.4%	11.1%	10.0%	0.0%
What was used to clean the needle/syringe?	(45)	(44)	(1)	(12)	(16)	(9)	(8)
With only water (boiled or not)	86.7%	86.4%	100.0%	66.6%	93.8%	100.0%	87.5%
Disinfecting solution	4.4%	4.5%	--	8.3%	--	--	12.5%
Water with soda	2.2%	2.3%	--	8.3%	--	--	--
With match/fire	2.2%	2.3%	--	--	6.3%	--	--
Other	4.5%	4.5%	--	16.8%	--	--	--
In the past, have you used previously used needle/syringe left in a "gathering place"?	(203)	(202)	(1)	(48)	(77)	(48)	(30)
Yes	51.1%	51.4%	--	33.4%	48.1%	59.6%	70.0%
Never	42.5%	42.1%	100.0%	58.3%	46.7%	34.0%	23.3%
Don't know	4.9%	5.0%	--	8.3%	2.6%	4.3%	6.7%
Refuse to answer	1.5%	1.5%	--	--	2.6%	2.1%	--
If yes, how often:	(104)	(104)	(0)	(16)	(38)	(29)	(21)
Always	1.9%	1.9%	--	--	2.6%	3.4%	--
Nearly always	9.6%	9.6%	--	12.5%	10.5%	10.3%	4.8%
Sometimes	80.8%	80.8%	--	75.0%	81.6%	79.3%	85.7%
Once	7.7%	7.7%	--	12.5%	5.3%	6.9%	9.5%

Significant differences

Ever used a previously used needle/syringe by age groups: $\chi^2 = 38.96$ (6df), $p<0.000$.

At last injecting used a previously used needle/syringe by age groups: $\chi^2 = 24.17$ (6df), $p<0.000$.

Table 12: Use of Needles/Syringes Among IDUs.

	Total	Gender		Age Groups			
		M	F	15-24	25-30	31-39	40+
N	302	300	2	105	92	69	36
During the last week, used a syringe that had already been filled not in your presence	(218)	(217)	(1)	(68)	(66)	(56)	(28)
Yes	22.5%	22.6%	--	16.2%	28.8%	19.6%	28.6%
No	73.9%	74.2%	--	82.4%	68.2%	71.4%	71.4%
Don't know	3.7%	3.2%	100.0%	1.5%	3.0%	8.9%	--
Used a syringe that had already been used by someone else in the last week	(217)	(216)	(1)	(69)	(66)	(55)	(27)
Yes	21.7%	21.3%	100.0%	23.1%	25.8%	16.4%	18.5%
No	74.2%	74.5%	--	75.4%	71.2%	74.5%	77.8%
Don't know	4.1%	4.2%	--	1.4%	3.0%	9.1%	3.7%
Used shared bottle, spoon, boiling pan/glass/container, cotton/filter or water in the last week	(217)	(216)	(1)	(68)	(65)	(56)	(28)
Yes	79.3%	79.2%	100.0%	76.5%	83.1%	82.1%	71.4%
No	20.7%	20.8%	--	23.5%	16.9%	17.9%	28.6%
Don't know	--	--	--	--	--	--	--
Did you take solution from a shared container in the last week	(216)	(215)	(1)	(68)	(64)	(56)	(28)
Yes	66.6%	--	100.0%	58.8%	82.8%	69.6%	64.3%
No	29.2%	29.3%	--	35.3%	21.9%	26.8%	35.7%
Don't know	4.2%	4.2%	--	5.9%	4.7%	3.6%	--
Injected drug diluted with someone else's blood in the last week	(217)	(216)	(1)	(68)	(66)	(55)	(28)
Yes	6.4%	6.4%	--	--	9.1%	10.9%	7.1%
No	89.9%	89.8%	100.0%	95.6%	89.4%	83.6%	89.3%
Don't know	3.7%	3.7%	--	4.4%	1.5%	5.5%	3.6%

Table 13: Availability and Disposal of Needles and Syringes Among IDUs.

	Total	Gender		Age Groups			
		M	F	15-24	25-30	31-39	40+
N	302	300	2	105	92	69	36
Can you get/buy new (unused) needles/syringes whenever you need them	(299)	(297)	(2)	(103)	(92)	(69)	(35)
Yes	98.3%	98.3%	100.0%	98.1%	97.8%	98.6%	100.0%
No	1.0%	1.0%	--	--	2.2%	1.4%	--
Don't know	0.7%	0.7%	--	1.9%	--	--	--
Where can you get/buy new (unused) needles/syringes	(276)	(274)	(2)	(92)	(85)	(66)	(33)
Pharmacy	97.1%	97.1%	100.0%	95.7%	97.6%	97.0%	100.0%
Friends	26.8%	26.6%	50.0%	26.1%	21.2%	30.3%	36.4%
Other IDUs	22.1%	22.3%	0.0%	21.7%	21.2%	21.2%	27.3%
Wholesale drug/salesperson	21.7%	21.9%	0.0%	18.5%	15.3%	25.8%	39.4%
Family/relatives	14.9%	15.0%	0.0%	14.1%	12.9%	22.7%	6.1%
Hospital	12.3%	12.0%	50.0%	10.9%	11.8%	15.2%	12.1%
Drug trafficker	6.9%	6.9%	0.0%	3.3%	7.1%	12.1%	6.1%
Syringe exchange program	6.9%	6.9%	0.0%	4.3%	8.2%	7.6%	9.1%
Shop/store	5.8%	5.8%	0.0%	4.3%	2.4%	7.6%	15.2%
Medical staff	5.8%	5.8%	0.0%	3.3%	7.1%	6.1%	9.1%
Sex partner	5.8%	5.5%	50.0%	2.2%	8.2%	4.5%	12.1%
Bought in street	4.7%	4.7%	0.0%	3.3%	7.1%	4.5%	3.0%
Stolen	1.8%	1.8%	0.0%	0.0%	4.7%	1.5%	0.0%
Other	1.4%	1.5%	0.0%	2.2%	1.2%	1.5%	0.0%
When you last threw away the used needle what did you do with it?	(302)	(300)	(2)	(105)	(92)	(69)	(36)
Garbage bin with cap	33.4%	33.7%	--	33.3%	34.8%	34.8%	27.8%
Dropped on the ground	19.5%	19.3%	50.0%	25.7%	20.7%	13.0%	8.3%
Garbage bin without cap	15.9%	16.0%	--	20.0%	14.1%	11.6%	16.7%
Other	12.6%	12.7%	--	10.5%	7.6%	17.4%	22.2%
Broke and threw away	11.9%	12.0%	--	9.5%	13.0%	13.0%	13.9%
At home	4.6%	4.3%	50.0%	--	6.5%	7.2%	8.3%
Saved for next use	1.0%	1.0%	--	--	2.2%	--	2.8%
Threw in river	0.7%	0.7%	--	1.0%	--	--	--
AIDS Center	0.3%	0.3%	--	--	1.1%	--	--

Table 14: Medical Treatment Among IDUs.

	Total	Gender		Age Groups			
		M	F	15-24	25-30	31-39	40+
N	302	300	2	105	92	69	36
Do you currently receive medical treatment, or have had treatment, because you are a drug user?	(298)	(296)	(2)	(104)	(91)	(69)	(34)
Never taken treatment	72.5%	72.3%	100.0%	90.4%	78.0%	56.5%	35.3%
Was in treatment but not now	21.5%	21.6%	--	7.7%	15.4%	34.8%	52.9%
Currently receiving medical treatment	5.0%	5.1%	--	1.9%	6.6%	7.2%	5.9%
Have received treatment in past and currently under treatment	1.0%	1.0%	--	--	--	1.4%	5.9%
What kind of treatment or help have you received?	(75)	(75)	(0)	(10)	(16)	(27)	(22)
"Extreme need"	38.7%	38.7%	--	40.0%	31.3%	59.0%	18.2%
with help	26.7%	26.7%	--	30.0%	18.8%	37.0%	18.2%
without help	12.0%	12.0%	--	10.0%	12.5%	22.0%	0.0%
Detoxification with other drugs	29.3%	29.3%	--	10.0%	18.8%	40.7%	31.8%
Hospital	17.3%	17.3%	--	0.0%	31.3%	7.4%	27.3%
Other	17.3%	17.3%	--	60.0%	12.5%	3.7%	18.2%
Narcology Institute	13.3%	13.3%	--	0.0%	12.5%	22.2%	9.1%
Detoxification without drugs	12.0%	12.0%	--	0.0%	6.3%	11.1%	22.7%
Detoxification with methadone	8.0%	8.0%	--	10.0%	6.3%	11.1%	4.5%
Consultations at a health center	6.7%	6.7%	--	0.0%	6.3%	11.1%	4.5%
Substitution with methadone	6.7%	6.7%	--	0.0%	12.5%	3.7%	9.1%
Psycho-social rehabilitation center	2.7%	2.7%	--	0.0%	0.0%	3.7%	4.5%
Self-treatment groups	1.3%	1.3%	--	0.0%	0.0%	0.0%	4.5%
Number of treatments undertaken:	(75)	(75)	(0)	(10)	(16)	(27)	(22)
1	42.7%	42.7%	--	40.0%	37.5%	48.1%	40.9%
2	28.0%	28.0%	--	40.0%	31.3%	18.5%	31.8%
3 or more	29.3%	29.3%	--	20.0%	31.3%	33.3%	27.2%
Mean	2.0	2.0	--	1.8	1.9	2.1	2.1
Where did you take medical treatment?	(74)	(74)	(0)	(9)	(16)	(27)	(22)
Home	5.4%	5.4%	--	33.3%	0.0%	3.7%	0.0%
Georgia	73.1%	73.1%	--	44.4%	68.8%	77.8%	72.7%
Outside Georgia	21.5%	21.5%	--	22.3%	31.2%	18.5%	27.3%

Table 15: Sources of Information About HIV/AIDS Among IDUs.

	Total	Gender		Age Groups			
		M	F	15-24	25-30	31-39	40+
N	302	300	2	105	92	69	36
Source of information about AIDS	(296)	(294)	(2)	(104)	(90)	(68)	(34)
T.V.	94.3%	94.6%	50.0%	98.1%	91.1%	92.6%	94.1%
Magazines/journals	81.1%	81.3%	50.0%	77.9%	85.6%	80.9%	79.4%
Friends/relatives	45.3%	45.2%	50.0%	55.8%	41.1%	42.6%	29.4%
Radio	39.5%	39.5%	50.0%	37.5%	36.7%	42.6%	47.1%
Booklets, posters	38.5%	38.4%	50.0%	48.1%	37.8%	32.4%	23.5%
Healthcare providers	29.7%	29.6%	50.0%	33.7%	26.7%	33.8%	17.6%
Billboards/street advert	17.2%	17.0%	50.0%	22.1%	16.7%	11.8%	14.7%
School teachers	12.5%	12.6%	0.0%	25.0%	5.6%	8.8%	0.0%
Workplace	10.8%	10.9%	0.0%	9.6%	7.8%	14.7%	14.7%
NGO representatives	7.3%	7.8%	0.0%	8.7%	5.6%	10.3%	5.9%
Training programs	2.4%	2.0%	50.0%	1.0%	3.3%	4.4%	0.0%
Given information in last year on:	(298)	(297)	(1)	(105)	(89)	(69)	(35)
Condoms	29.2%	29.3%	100.0%	42.9%	29.2%	18.8%	8.6%
Written materials on AIDS	21.1%	21.2%	100.0%	28.6%	19.1%	18.8%	8.6%
Consultation with medical professional	12.4%	12.5%	100.0%	14.3%	10.1%	15.9%	5.7%
Sources for information about condoms	(300)	(299)	(1)	(105)	(91)	(69)	(35)
T.V.	94.7%	94.6%	100.0%	98.1%	91.2%	95.7%	91.4%
Drugstore	62.0%	61.9%	100.0%	61.0%	67.0%	56.5%	62.9%
Magazines/journals	56.0%	55.9%	100.0%	53.3%	48.4%	60.9%	74.3%
Radio	55.0%	55.2%	100.0%	51.4%	51.6%	59.4%	65.7%
Hospital	27.3%	27.4%	100.0%	27.6%	29.7%	24.6%	25.7%
Health center	25.7%	25.8%	100.0%	23.8%	28.6%	24.6%	25.7%
Street stands	23.7%	23.7%	100.0%	19.0%	26.4%	23.2%	31.4%
Friends/neighbors	21.0%	20.7%	100.0%	27.6%	19.8%	15.9%	14.3%
Billboards/notices	14.3%	14.4%	100.0%	17.1%	13.2%	14.5%	8.6%
Video shops	13.3%	13.4%	100.0%	8.6%	12.1%	20.3%	17.1%
Medical personnel/volunteers	12.7%	12.4%	100.0%	15.2%	9.9%	14.5%	8.6%
NGOs	10.3%	10.4%	100.0%	12.4%	6.6%	17.4%	0.0%
Comic books	7.3%	7.4%	100.0%	6.7%	6.6%	10.1%	5.7%
Trainings	3.3%	3.3%	100.0%	1.9%	2.2%	8.7%	0.0%
Social workers	3.0%	3.0%	100.0%	4.8%	1.1%	4.3%	0.0%
Heard/seen information about needle exchange program	(298)	(297)	(1)	(105)	(90)	(69)	(34)
Yes	24.5%	24.6%	0.0%	14.3%	27.8%	29.0%	38.2%
Heard/seen information about similar programs	(267) 8.2%	(266) 8.3%	(1) 100.0%	(97) 4.1%	(82) 6.1%	(56) 14.3%	(32) 15.6%
Persons with major influence on IDU continuing drug use	(302)	(300)	(2)	(105)	(92)	(69)	(36)
Nobody	62.9%	63.0%	50.0%	66.7%	73.9%	43.5%	61.1%
IDU partner	27.2%	27.4%	0.0%	17.1%	20.7%	47.8%	33.3%
Friend/neighbor	17.8%	18.0%	0.0%	15.2%	10.9%	31.8%	16.7%
School/classmates	4.0%	4.0%	0.0%	1.9%	2.2%	5.8%	11.1%
Parents	1.0%	1.0%	0.0%	1.0%	1.1%	1.4%	0.0%
Spouse	1.0%	0.7%	50.0%	1.0%	1.1%	1.4%	0.0%
Siblings	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
My children	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Persons with major influence on quitting drug use	(302)	(300)	(2)	(105)	(92)	(56)	(32)
Parents	51.0%	51.0%	50.0%	41.9%	60.9%	52.2%	50.0%
Spouse	29.8%	29.7%	50.0%	8.6%	25.0%	47.8%	69.4%
Friend/neighbor	20.9%	21.0%	0.0%	24.8%	18.5%	21.7%	13.9%
Siblings	20.5%	20.7%	0.0%	26.7%	23.9%	13.0%	8.3%
School/classmates	17.6%	17.3%	50.0%	28.6%	16.3%	10.1%	2.8%
Nobody	15.6%	15.7%	0.0%	18.1%	13.0%	14.5%	16.7%
My children	3.3%	3.3%	0.0%	1.0%	1.1%	7.2%	8.3%
Needle partner	0.7%	0.7%	0.0%	0.0%	1.1%	1.4%	0.0%

Survey Questionnaire

Questionnaire Identification Number: ☐
Questionnaire is Coded as: ☐
Questionnaire is Word Processed by: ☐

Behavior and Biomarker Study Among Male Intravenous Drug Users (M-IDUs) in Georgia

Partner Organization: ☐

Introduction: "My name is_____. An American and a Georgian organization are implementing a joint project titled "AIDS and Sexually Transmitted Diseases Prevention in Georgia." The project is funded by the United States Agency for International Development (USAID). This survey is aimed at exploring the existing situation. The questionnaire has been designed by our counterparts from the US. Has anybody taken an interview over the last five weeks for this study? If somebody has already taken an interview from the person you are talking to over the BBPS period, don't take another one. Tell him/her, that you cannot re-interview him/her. Thank the person and finish conversation. If nobody has taken an interview from the person in question, continue as follows:

Confidentiality and consent: "I am planning to ask you several questions that are hard to answer by some people. Your responses will be kept confidential. The questionnaire will not show your name and will never be referred to in connection with the information that you will share with us. You are not obliged to answer all my questions, and whenever you wish you may refuse to answer my questions. You may finish the interview at any time per you desire. However, we would love to note that your answers would help us better understand what people think, say and do in view of certain types of behavior. We would highly appreciate your input to this study.

Interviewer's Code: _____
(Interviewer's signature certifying that the respondent has verbally agreed to the interview)

	Respondent 1	Respondent 2	Respondent 3
Date			
Interviewer			
Result			

Result Codes: Completed – 1; Partially Completed – 2; Previously Interviewed – 3; Interview Withheld – 4; Other – 5

Date and time of interview: /_____/date/____/hour/____/minute/
Signature: _____ Date _____

Q1. City: 1. Tbilisi 2. Batumi

Q2. Respondent ID # ☐☐☐

Q3. How did you establish a contact with the respondent?

1. He is a patient of the counterpart organization
2. He has been hospitalized and I visited him/her there
3. He has been picked out on a snowball basis
4. Other _____

Q4. Place of the interview:

1. Outside
2. At home
3. At office

Respondent's Personal Data

A1. Where do you live presently?

1. Tbilisi
2. Batumi
3. Other _____ (please indicate)
4. Neighborhood _____ (please indicate)

A2. How long have you been living in this place? (Please write down only the number of years, or months, or both; e.g. 2 years and 6 months)

1.1 /_____ /years/ 1.2 /_____/months/
2. Always (since birth)
3. Other (please indicate)_____

A3. Are you an IDP?

1. Yes
2. No
9. No response

A4. Within the last 12 months have you left the city or the current place of residence for more than a month?

1. Yes
2. No
8. Don't know
9. No response

A5. How old are you?

/_____/_____/ years old

A6. Education:

1. None
2. Primary
3. Secondary or vocational school
4. Incomplete Higher
5. Higher
9. No response

A7. Which ethnic group do you belong to?

1. Georgian
2. Russian
3. Armenian
4. Azeri
5. Other _____ (please indicate)
9. No response

A8. What is your marital status? (please read out the options)

1. Married
2. Divorced/Separated for ever
3. Widower
4. Has never been married (go to the question A10)

Other (please indicate)_____

A9. How old were you when you got married for the first time?
Please indicate the exact age: _____

A10. With whom do you live now? (Interviewer: do not read out the options loud; choose the option below relevant to the response)

1. With a spouse (with spouse and parents)
2. Married, but live with another female partner
3. Widower, but live with a female partner
4. Not married, live with a female partner
5. Widower, don't have a female partner
6. Married, don't live with my wife or a partner
7. Single
8. Not married, live with my family (parents)
9. Refused to answer
10. Other:_____ (please indicate)

A11. Within the last month how often have you taken alcoholic beverages, such as beer, wine, vodka, other? (please read out the options)

1. Every day
2. More than once a week
3. Less than once a week
4. Never (don't read out loud)

Other_____ (please indicate)

9. No response

Drug Usage

B1. How long have you been using drugs? I only mean any kind of drugs used for non-medical purposes, including those to be swallowed, smoked and/or injected (please indicate only number of years, or months, or both)

1.1 /_____years/ 1.2 _____months/
Other _____ (please indicate)

B2. How long have you been using intravenous injection drugs? No matter whether you do it yourself or somebody else makes injections for you. (Please indicate only number of years, or months, or both)

1.1 /_____years/ 1.2 _____months/
Other _____ (please indicate)

B3. How old were you when you took the first intravenous drug injection?
_____ years old (please indicate an exact age)

B4. Out of the following drugs, which one have you used within the last week and which one did you inject? (Do not read out the options loud; choose the option below relevant to the response; several responses can be acceptable)

	Consumed Last Week		Used Last Week	
	Yes	No	Yes	No
1. Barbiturates	1	2	1	2
2. Tranquilizes	1	2	1	2
3. Inhalants	1	2	1	2
4. Codeine	1	2	1	2
5. Heroin	1	2	1	2
6. Opium	1	2	1	2
7. Poppy	1	2	1	2
8. Methadone	1	2	1	2
9. Morphine	1	2	1	2

10. Tramadol	1	2	1	2
11. Other Opiates _____ (please define)	1	2	1	2
12. Cocaine	1	2	1	2
13. Amphetamine	1	2	1	2
14. Caffeine	1	2	1	2
15. Valium	1	2	1	2
16. LSD	1	2	1	2
17. Ephedrine	1	2	1	2
18. Marijuana	1	2	1	2
19. Cyclodol	1	2	1	2
20. Ecstasies	1	2	1	2
21. Combination _____ (please specify)	1	2	1	2
22. Other _____ (please specify)	1	2	1	2
Don't know/don't remember	88		88	
No response	99		99	

B5. Within the last month did you switch from one drug to another?

Yes	1	**Continue**
No	2	Go to question B6

B5.1 If yes, from which _____ to which?_____ (please indicate)

B5.2 Why?_____ (please indicate)

B6. When did you use drugs last?

1. _____ months ago
2. _____ days ago

Other_____

8. Don't remember (go to B9)
9. Refused to answer (go to B9)

B7. How many times did you take drugs that day?

1. _____ times
8. Don't remember
9. Refused to answer

B8. (If you did not take the last shot today or yesterday) **Can you tell me why didn't you take drugs today or yesterday?** (please read out the options below and match them with the responses) **Besides these reasons, were there any other reasons?** (Several responses are acceptable)

1. Had no money
2. Had no desire
3. Couldn't get drugs
4. I'm receiving treatment
5. Other _____ (please indicate)

B9. Within the last week how often did you take drugs? (please read out the options loud)

1. Once a week
2. Two to three times a week
3. Four to six times a week
4. Once a day
5. Two to three times a day
6. Four or more times a day
7. Have not taken (don't read out)
8. Don't know (don't read out)
9. No response (don't read out).

C. Needle Sharing Habit

C1. Have you ever used a needle/syringe that was used by somebody else before?

Yes	1	***Continue***
No	2	***Go to C12***
Don't know	8	
No response	9	

C2. When you last took the shot did you use a needle/syringe that was used by somebody else before or not?

Yes	1	***Continue***
No	2	***Go to C4***
Don't know	8	
No response	9	

C3.1. When you last injected the drugs, did you use a needle/syringe that was left at the place of gathering (e.g. where the drugs were prepared, the dedicated flat, or elsewhere)?

1. Yes
2. No
8. Don't know
9. No response

C3.2 If you were many people there, how do you think, how many people used the shared needle?

1. _____ (please specify the number)
77. I was alone
88. Don't know
99. No response

C3.3 In the instance before the last usage, did you use a needle/syringe that had been used by anybody else before?

Yes	1	***Continue***
No	2	***Go to C3.5***
Don't know	8	
No response	9	

C3.4 Did you then use a needle/syringe that was left at the place of gathering (of drug preparing, or some other place)?

1. Yes
2. No
8. Don't know
9. No response

C3.5 If you were several people at that time, how do you think, how many people could have used the shared needle?

1. _____ (please specify the number)
77. I was alone
88. Don't know
99. No response

C3.6 In the instance before the last usage, did you use a needle/syringe that had been used by somebody else?

Yes	1	***Continue***
No	2	***Go to C3.8***
Don't know	8	
No response	9	

C3.7 If yes, did you use at that time needle/syringe that was left at the place of gathering?

1. Yes
2. No
8. Don't know
9. No response

C3.8 If you were many people there, how do you think, how many people could have used the shared needle?

1. _____ (please specify the number)
77. I was alone
88. Don't know
99. No response

C4. Please recall all instances of injecting that took place over the last week. How often did you use the same needle/syringe that had been used by others?

1. Always
2. Nearly always
3. Sometimes
4. Once
5. Never
8. Don't know
9. No response

C5. In the past, when you injected drugs, have you ever used needles/syringes that had been left at the place of gathering?

1. Always
2. Nearly always
3. Sometimes
4. Once
5. Never
8. Don't know
9. No response

C8. Over the last week, did you use a needle/syringe that had been used by any of the following people? (please read out the list loud; several responses are acceptable)

	Y	N	DK	NR
1. Your usual partner in sex	1	2	8	9
2. Partner in sex whom you didn't know before	1	2	8	9
3. Someone from the drug-addict community	1	2	8	9
4. Drug trafficker	1	2	8	9
5. Stranger	1	2	8	9
6. Acquaintance	1	2	8	9
Other (please specify): _____	1	2	8	9

C9. With how many different drug user partners did you share a needle/syringe last week? (Count all those people with whom you shared a needle/syringe)

1. Number of Partners: _____
8. Don't know
9. No response

C10. During the last week, when you injected drugs with a used needle/syringe, how many times did you clean them before usage? (please read out the options)

Always	1	***Continue***
Almost always	2	
Sometimes	3	
Once	4	
Never	5	***Go to C11***
Don't know	8	
No response	9	

C10.1 If you cleaned the needle/syringe, how did you do it? (please read out the options; several responses are acceptable)

1. With water
2. Disinfecting solution.
3. Saliva
4. Boiled water
5. Chlorine water
6. Put on match/liter fire
7. Other _____
8. No response
9. Don't know

C11. During the last week how often have you used a needle/syringe that nobody had used before? (please read out the options)

1. Always
2. Almost always
3. Sometimes
4. Never
8. Don't know
9. No response

C12. During the last week how many times did you give the used needle/syringe to others? (please read out the options)

1. Always
2. Almost always
3. Sometimes
4. Never
8. Don't know
9. No response

C13. When you last threw away the used needle, how did you do that? (do not read out the options. Match the responses with the options below. If the respondent's answer is different from the below presented options, take note of the full answer).

1. Threw the needle into the garbage bin without a cap
2. Threw the needle into the garbage bin with a cap
3. Put into a bottle/can/boiling pan and left there
4. Dropped on the ground
5. Other_____
9. No response

C14. Can you actually get new and unused needles and syringes whenever you need them?

Yes	1	***Continue***
No	2	***Go to C16***
Don't know	8	
No response	9	

C15. Where can you get/buy new needles/syringes? (please read out all options and mark the selected one)

	Y	N
Drug store	1	2
Shop	1	2
Medical staff	1	2
Hospital	1	2
Wholesale drug store/salesperson	1	2
Family/Relatives	1	2
Partner in sex	1	2
Friends	1	2

Other injection drug user	1	2
Drug trafficker	1	2
Syringe exchange program	1	2
Stolen from a legal source (hospital, drug store)	1	2
Bought in the street	1	2
Other (please specify) _____	1	2

C16. During the last week have you used a syringe that had already been filled with drugs without your presence?

1. Yes
2. No
8. Don't know
9. No response

C17. During the last week how many times did you take drugs after it had been filled with solution from a syringe that had been used by somebody else? (Whether it was filled from the "front" or the "back") (Please explain to the respondent the filling technique from the front and the back ends. Make sure he understands what the question is about.)

1. Always
2. Almost always
3. Sometimes
4. Once
5. Never
8. Don't know
9. No response

C18. During the last week when you injected drugs, how many times did you use shared bottle, spoon, boiling pan/glass/container, cotton/filter or water? (please read out the options)

1. Always
2. Almost always
3. Sometimes
4. Once
5. Never
8. Don't know
9. No response

C19. During the last week how many times did you take solution from the shared container? (please read out the options)

1. Always
2. Almost always
3. Sometimes
4. Once
5. Never
8. Don't know
9. No response

C20. During the last week how often was the liquid drug diluted with somebody else's blood (for filtration)? (Read out the options)

1. Always
2. Almost always
3. Sometimes
4. Once
5. Never
8. Don't know
9. No response

C21. Please recall the last instance of your taking drugs and tell me (read out all options and mark the chosen one)

	Yes	**No**	**Don't Know**	**NR**
1. Did you use a syringe after it was filled by somebody else from his/her used syringe?	1	2	8	9
2. Did you use a shared bottle, spoon, boiling pan/glass, container, cotton/filter or water?	1	2	8	9
3. Did you take solution from the shared container?	1	2	8	9
4. Did you use the liquid that was diluted with somebody else's blood (for filtration)?	1	2	8	9

C22. Over the last year have you injected drugs in another country/city/town or district?

Yes	1	***Continue***
No	2	***Go to C23***
Don't remember	8	
No response	9	

C22.1 If yes, in which other countries/cities/towns/neighborhoods did you inject drugs? (Make sure that cities and countries match each other if the place in question is outside Georgia)

	1st Case	2nd Case	3rd Case	4th Case	5th Case
1. City					
2. City neighborhood					
3. Country					

C22.2 When you injected drugs in any other country/city/town/neighborhood did you use somebody else's needle/syringe?

1. Yes
2. No
3. Don't remember
9. No response

C23. When you injected drugs in another country/city/town/neighborhood did you allow somebody else to use your used needle/syringe?

1. Yes
2. No
3. Don't remember
9. No response

C23. Do you currently get any medical treatment (or assistance), or have you ever taken such a treatment (or assistance) because you are a drug user? (Please read out the options below)

Currently taking a medical treatment	1	***Continue***
Used to take a medical treatment, but later quit it	2	
Have been taking a medical treatment	3	
Never have been treated	4	***Go to D1***
No response	9	

C24. How many years ago did you take medical treatment or assistance because you were a drug user?

1. _____years _____months (please indicate)
88. don't know
99 no response

C25. What kind of medical treatment or assistance have you taken?
(Do not read out the options. Ask also this: "What other treatments have you taken? Several responses are acceptable)

	Y	N
1. Consultations at a health center	1	2
2. Self-treatment groups	1	2
3. Detoxification with Methadone	1	2
4. Substitution with Methadone	1	2
5. Detoxification with other drugs	1	2
6. Detoxification without drugs	1	2
7. Psycho-social rehabilitation center	1	2
8. Survived "extreme need" with somebody else's help	1	2
9. Survived "extreme need" without anybody's help	1	2
Other (please write down)	1	2
Don't know	88	
No response	99	

C26. Can you tell me in which country/city did you take medical treatment?
_____(please indicate)

D. Sexual Life Record

D1. How old were you when you had the first sexual contact in your life notwithstanding the form of it?
1. _____ years old (please indicate the exact age)
77. Never had it (go to F2)
88. Don't know
99. No response

D2. Have you had sex during the last 12 months?

Yes	1	***Continue***
No	2	***Go to D4***
No response	9	

D2.1 Does your partner/spouse have another sexual partner?
1. Yes
2. No
7. Don't know
8. No response

D3. In total with how many male sexual partners have you had over the last 12 months?
1. _____ (please specify the exact number)
88. Don't know
99. No response

D3.1 How many of those were "regular partners" (i.e. spouse or permanent sexual partner)?
1. _____ (number) 88. Don't know 99. No response

D3.2 How many of your female partners were "paid" ones? (i.e. those ones with who you had a sexual contact in exchange for money or drugs)
1. _____number 88. don't know 99. no response

D3.3 How many of those partners were "occasional" ones? (i.e. those ones that you are not married to, never have lived together, and never have paid money in exchange for sex)

1. _____ (number) 88. Don't know 99. No response

D4. We talked about your female partners. Have you ever had a male sexual partner?

Yes	1	***Continue***
No	2	***Go to D4***
No response	9	

D4.1 If yes, have you ever had anal sex (passive intercourse) with your male partner during the last 12 months?

Yes	1	***Continue***
No	2	***Go to E1***
No response	9	

D4.2 With how many male partners have you had anal sex (passive intercourse) over the last 12 months?

1. _____ (number) 88. Don't know 99. No response

Number and Types of Partners

E1. Have you had sex with your regular partner over the last 12 months?
(Compare with question D3.1 and circle the response for the question E1)

Yes	1	***Continue***
No	2	***Go to E2***

E1.1 Please recall the most frequent and regular partner in sex. How many times did you have sex with him over the last month?

1. _____ times 88. Don't know 99. No response

E1.2 When you had last sexual contact with your regular partner did you use a condom?

Yes	1	***Continue***
No	2	***Go to E1.4***
Don't know	8	
No response	9	

E1.3 Who offered to use condoms at that time, you or your partner's?

1. I did
2. Partner
3. Both Go to E1.5
8. Don't know
9. Refused to answer

E1.4 Why didn't you and your partner use a condom at that time? *(Don't read out the options. Match the response up to the options below. Several responses are acceptable)*

	Y	N
1. Was not available/Did not have it	1	2
2. Too expensive	1	2
3. Partner refused	1	2
4. Don't like it	1	2
5. Use other contraceptives	1	2
6. Didn't think necessary	1	2
7. Didn't think of it	1	2

Other (please indicate) _____	1	2
Don't know	88	
No response	99	

E1.5 How often have you used condoms with your sexual partner within the last year? (pleas read out the options below)

1. Always
2. Almost always
3. Sometimes
4. Never
5. Don't know
6. No response

E1.6 Does your regular sexual partner inject drugs?

1. Yes 2. No 3. Don't know 4. No response

E1.7 Have you had an anal sex with your regular sexual partner?

1. Yes 2. No 3. Don't know 4. No response

E2. Did you have a paid sex with a female partner over the last 12 months? (Compare the question with D3.2 and circle response to E2)

Yes	1	***Continue***
No	2	***Go to E3***

E2.1 Please recall all the paid sexual partners to whom you paid money or drugs in exchange for sex over the last month. How many of those did you have in total?

1. _____ (please indicate an exact number)
88. Don't know (go to E3)
99. No response (go to E3)

E2.1.1 Please recall the partners with whom you had sex to get money or drugs. How many of those did you have?

1. _____ 88. Don't know 99. No response

E2.2 Please recall who was your last "paid" female sexual partner? How many times did you have sex with him over the last month?

1. _____ times 88. Don't know 99. No response

E2.3 Last time when you had sex with that woman, did you use a condom?

Yes	1	***Continue***
No	2	***Go to E2.5***
Don't know	8	***Go to E2.6***
No response	9	

E2.4 Whose initiative was to use condoms at that time (your or your partner's)?

1. Mine
2. Partner's
3. Mutual (Go to E2.6)
8. Don't know
9. No response

E2.5 Why didn't you and your partner use condoms at that time? (Don't read out the options. Several responses can be accepted)

	Y	N
1. Was not available/Did not have it	1	2
2. Too expensive	1	2

3. Partner refused	1	2
4. Don't like it	1	2
5. Use other contraceptives	1	2
6. Didn't think necessary	1	2
7. Didn't think of it	1	2
Other (please indicate) _____	1	2
Don't know	88	
No response	99	

E2.6 Last year how many times did you use condoms with your female partners? (Read out the options)

1. Always
2. Almost always
3. Sometimes
4. Never
8. Don't know
9. No response

E2.7 Does your paid for female partner inject drugs?

1. Yes
2. No
8. Don't know
9. No response

E2.8 Have you had anal sex with your paid for partners?

1. Yes
2. No
8. Don't know
9. No response

E3. Did you have a sexual contact with an irregular partner over the last 12 months? (Compare with the question D3.3 and circle the response to E3)

Yes	1	***Continue***
No	2	***Go to F1***

E3.1 Please recall your very last irregular sexual partner. How many times did you have sexual contacts with him within the last month?

1. _____ times 8. Don't know 9. No response

E3.2 Last time when you had a sexual contact with your irregular partner, did you use condoms?

Yes	1	***Continue***
No	2	***Go to E3.4***
Don't know	8	***Go to E3.5***
No response	9	

E3.3 Whose initiative was then to use condoms?

1. Mine
2. Partner's
3. Mutual Go to E3.5
8. Don't know
9. No response

E3.4 Why didn't you and your partner use condoms then? (Don't read out the options. Several responses can be accepted.)

	Y	N
1. Was not available/Did not have it	1	2
2. Too expensive	1	2
3. Partner refused	1	2
4. Don't like it	1	2
5. Use other contraceptives	1	2
6. Didn't think necessary	1	2
7. Didn't think of it	1	2
Other (please indicate) _____	1	2
Don't know	88	
No response	99	

E3.5 How often have you used condoms with your irregular partner over the last year?

1. Always
2. Almost always
3. Sometimes
4. Never
8. Don't know
9. No response

E3.6 Do you know whether your irregular partner takes drugs?

1. Yes
2. No
8. Don't know
9. No response

E3.7 Have you had anal sex with your irregular partners?

1. Yes
2. No
8. Don't know
9. No response

F. Use of Condoms

(Do not ask Q F1. Compare the responses to questions: E1.2, E1.5, E2.3, E2.6, E3.2, E3.5 and mark respectfully)

F1. Have you ever used condoms?

Yes	1
No	2

F2. Do you know of a person or place where you can get condoms?

Yes	1	***Continue***
No	2	***Go to G1***
Don't know	8	
No response	9	

F3. At which places or from whom can you get condoms?
(Don't read out the options. Several responses are acceptable)

	Y	N
Shop	1	2
Drug Store	1	2
Market	1	2

Health Clinic	1	2
Hospital	1	2
Family Planning Center	1	2
Bar/Hotel	1	2
Health care worker /Volunteer/NGO	1	2
Friend	1	2
Other (please indicate)	1	2
No response	99	

F4. How long would you need to get from your residence or work place to where condoms are sold/available?

1. Less than 30 minutes
2. More than 30 minutes
8. Don't know
9. No response

Sexually Transmitted Diseases

G1. Have you heard of diseases that are transmitted sexually?

Yes	1	***Continue***
No	2	***Go to G4***
No response	9	

G2. Can you describe STD symptoms that are observed among women?
(Don't read out the options. Multiple answers are acceptable)

	Y	N
1. Stomach (abdominal) ache	1	2
2. Vaginal release	1	2
3. Odorous release and burning pain while urinating	1	2
4. Vaginal ulcer	1	2
5. Swollen vulva	1	2
6. Itching	1	2
Other: (a) _____ (please specify)	1	2
Other: (b) _____ (please specify)	1	2
Other: (c) _____ (please specify)	1	2
No response	99	

D3. Can you describe STD symptoms that are observed among men?
(Don't read out the options. Multiple responses are acceptable)

	Y	N
1. Genital release	1	2
2. Burning while urinating	1	2
3. Genital ulcer	1	2
4. Swollen lower abdomen	1	2
Other: (a) _____ (please specify)	1	2
Other: (b) _____ (please specify)	1	2
Other: (c) _____(please specify)	1	2
No response	99	

G4. Have you observed genital release or burning pain while urinating during the last 12 months?

1. Yes
2. No
8. Don't know
9. No response

G5. Have you observed genital ulcer/rash over the last 12 months?

1. Yes
2. No
8. Don't know
9. No response

(Interviewer: If there is no "Yes" to G4 and G5, go to H1)

G6. Whom did you apply for medical treatment? (Please read out the options; multiple answers are acceptable)

	Yes	No
1. STD Institution	1	2
2. Private doctor	1	2
3. Drugstore	1	2
4. Friend	1	2
5. Nobody	1	2
Other (please specify)	1	2
Don't know	88	
No response	99	

Knowledge, Opinion and Attitude

H1. Have you heard of HIV or AIDS?

1. Yes
2. No
8. Don't know
9. No response

(Please explain that HIV is a human immunodeficiency virus that causes AIDS.)

H2. Do you know any person who has been infected, ill with, or has died of AIDS?

Yes	1	***Continue***
No	2	***Go to H4***
Don't know	8	
No response	9	

H3. Do you have a close relative or friend who has been infected, ill with, or has died of AIDS?

1. Yes, a close relative
2. Yes, a close friend
3. No
8. Don't know
9. No response

H4. Please give me your opinion regarding the following:
(Please read out all options and mark the relevant answer.)

Assertions	**Yes**	**No**	**DK**	**NR**
1. Can one reduce the HIV risk if one properly uses condoms during every sexual contact?	1	2	8	9
2. Can one get HIV as a result of a mosquito's bite?	1	2	8	9
3. Do you believe that one may protect oneself from HIV/AIDS by having one uninfected and reliable sexual	1	2	8	9

partner?				
4. Do you believe that one can protect oneself from HIV/AIDS by keeping away from (avoiding) sexual contact?	1	2	8	9
5. Do you believe that one can get HIV/AIDS by taking food or drink that contains someone else's saliva?	1	2	8	9
6. Do you believe that one may be infected with HIV/AIDS by using a needle/syringe already used by someone else?	1	2	8	9
7. Do you believe that drug users may protect themselves form HIV/AIDS by switching to non-injection drugs?	1	2	8	9

H5. Do you believe that an HIV/AIDS-infected pregnant woman can transfer virus to fetus?

Yes	1	
No	2	***Go to H7***
Don't know	8	
No response	9	

H6. What do you believe a pregnant woman might do reduce the risk of transferring the infection to fetus?

(Don't read out the options to the respondent. Multiple answers are acceptable)

Take medication (antiretrovirals) 1
Other _____ please specify
Don't know 8
No response 9

H7. Can a mother transfer the HIV/AIDS to her baby through breastfeeding?

1. Yes
2. No
8. Don't know
9. No response

H8. Is it possible in your neighborhood/town that one take confidential HIV/AIDS test to see if one is infected? "Confidential" means that nobody will know about the test results without one's permission.

1. Yes
2. No
8. Don't know
9. No response

H9. I don't want to know about the test results but have you ever taken an HIV test?

Yes	1	
No	2	***Go to H13***
No response	9	

H10. When did you take the last HIV test?

1. Last year
2. About one or two years ago
3. About two or four years ago
4. Four or more years ago
8. Don't know
9. No response

H11. Was it your initiative to take the HIV/AIDS test or you had to?

1. It was voluntary
2. I had to
3. No response

H12. Don't tell me the test result, but do you know it?

1. Yes
2. No
9. No response

H13. Did you use the services of either Narcology Institute, or AIDS Center, or Bemoni, or Sasoeba the last year?

Yes	1	***Continue***
No	5	***Go to I1***
Don't know	8	
No response	9	

H13.1 If yes, of which one exactly? (Please read out the options. Multiple answers are acceptable)

	Yes	**No**
1. Narcology Institute	1	2
2. AIDS Center	1	2
3. Bemoni	1	2
4. Sasoeba		
Other ***(please specify)***		

H13.2. Please assess their services by a 5-grade system, whereby 1 is the lowest and 5 is the highest grade. So the organization… (*Name the institution that was given first by the respondent for the previous question. If there is another institution named, read the name of the next one and so on. Rate each of the institution according to marks given by the respondent. If the respondent says "I don't know", write down 8; if he/she has no answer, right down 9.)*

	Narcology Institute	AIDS Center	Bemoni	Sasoeba
1. Empathic Service				
2. Staff Quality				
3. Consultation Quality				
4. Problem Solving				

H13.3 Are you going to use the services of that institution(s) in the future too?

1. Yes/maybe
2. No/probably not

H13.4 Can you tell me why do you think so?

Note full answer here:_____

Awareness of AIDS

(Questions for those respondents who answered positively to Q H1)

I1. Out of the below listed information sources which one was used by you as a source of information about AIDS? (Read out the following possible responses. Several answers are acceptable)

	Y	N
1. Radio	1	2
2. TV	1	2
3. Magazines/Journals	1	2
4. Booklets, Posters	1	2
5. Healthcare system staff	1	2
6. Schools/Teachers	1	2
7. Friends/Relatives	1	2
8. Work Place	1	2
9. NGO representatives	1	2
10. Training Programs	1	2
11. Billboards/Street Advertising	1	2

12. Social Workers	1	2
Other (please specify)		

I2. Did anybody supply you with the following items and/or information about those last year? (Multiple answers are acceptable)

	Y	N
1. Condoms	1	2
2. Brochures/pamphlets/booklets on AIDS	1	2
3. Qualified information on AIDS	1	2
Other (please specify)	1	2

Encouraging to Use Condoms

J1. Over the last year have you seen, read or heard any advertisement on condoms from any of the following sources? (Multiple answers are acceptable)

	Y	N
1. Radio	1	2
2. TV	1	2
3. Drugstore	1	2
4. Health Center	1	2
5. Hospital	1	2
6. Medical personnel/Volunteers	1	2
7. Friends/Neighbors	1	2
8. NGOs	1	2
9. Magazines/Journals	1	2
10. Video Shops	1	2
11. Street Stands	1	2
12. Trainings	1	2
13. Billboards/Notices	1	2
14. Comics Books	1	2
15. Social Workers	1	2
Other (Please specify)	1	2

J2. Have you heard/seen or read any information about the syringe exchange program over the last year?

1. Yes
2. No

J3. Have you heard/seen or read any information or material about any other similar program?

Yes	1	***Continue***
No	2	***Go to J4***

J3.1 If yes, what is it?

_____

_____

J4. Have you ever seen or read these materials? (Please show the respondent the booklets)

a. Booklet A 1. Yes 2. No
b. Booklet B 1. Yes 2. No
c. Booklet N 1. Yes 2. No

J5. Where do you normally gather to inject drugs?
_____ (please specify)

J6. Do not tell me their names, but please specify two persons who have the major impact on you in terms of continuing the using of drugs.

	Person One	Person two
Parents	1	1
Siblings	2	2
Spouse	3	3
My children	4	4
School/class mate	5	5
Neighbor friend	6	6
Needle partners	7	7
Nobody	99	

J7. Do not tell me their names, but please specify two persons who have the major impact on you in terms of quitting the using of drugs.

	Person One	Person two
Parents	1	1
Siblings	2	2
Spouse	3	3
My children	4	4
School/class mate	5	5
Neighbor friend	6	6
Needle partners	7	7
Nobody	99	

Q5 You have been very helpful. After generalization and statistical analysis of the present study our organization will plan projects that will be beneficial for all. If in several months I need to take another interview from you, would you make yourself available?

1. Yes
2. No
3. Don't know (we'll see)

Interviewer, thank the respondent for cooperation and say good-bye. After the interview make sure you have taken down the respondent's identification data so that the same person is used in the following panels of the study.

Q6 During the interview the respondent was:

1. Interested
2. Indifferent
3. Uninterested
4. Calm
5. Agitated

Time when interview was concluded_____
The questionnaire is kept till completion of the project.

Q7. Quality control on the interview was carried out by_____
Position_____
Organization_____

Quality control group member has used (completed) quality control card_____
Signature_____